

# Environmental protests and NIMBY activism: Local politics and waste management in Beijing and Guangzhou

**Natalie W. M. Wong**  
University of York, UK

China Information  
2016, Vol. 30(2) 143–164  
© The Author(s) 2016  
Reprints and permissions:  
[sagepub.co.uk/journalsPermissions.nav](http://sagepub.co.uk/journalsPermissions.nav)  
DOI: 10.1177/0920203X16641550  
[cin.sagepub.com](http://cin.sagepub.com)



## Abstract

Protests in post-Mao China not only indicate citizens' increasing dissatisfaction but also challenge the regime to act and take appropriate measures. This article discusses local government response to environmental activism within China's decentralized political structure. Anti-incinerator protests in Beijing and Guangzhou are used to illustrate the emergence of public participation in municipal policymaking on waste management. The Beijing and Guangzhou governments' different attitudes and responses to citizens' grievances are analysed, particularly in light of a new public-consultative waste management mechanism implemented in Guangzhou, the Guangzhou Public Consultation and Supervision Committee for Urban Waste Management (广州市城市废弃物处理公众咨询监督委员会). Changes in policies on waste management and disposal are examined through documentary analysis and in-depth interviews with stakeholders involved in anti-incinerator protests. The main goal here is to demonstrate that policy change is not only determined by protest outcomes, but that it is also greatly affected by the responses of local governments and actors within a framework of advocacy coalition. This study throws new light on Chinese policymaking on environmental issues and it re-appraises studies of environmental management in China.

## Keywords

NIMBY, urban waste management, environmental protests, environmental policy, Beijing, Guangzhou, advocacy coalition

---

## Corresponding author:

Natalie W. M. Wong, Department of Politics, University of York, Heslington, York YO10 5DD, UK.  
Email: [wnw500@york.ac.uk](mailto:wnw500@york.ac.uk)

There was much controversy over the construction of incinerators in Beijing and Guangzhou in 2006 and 2009, respectively. In 2006, Beijing residents staged several demonstrations against plans to build an incinerator in Liulitun (六里屯) district. Three years later, in 2009, residents of Guangzhou's Panyu (番禺) district protested the planned construction of an incinerator near their homes. The protesters expressed not only their concerns about the environmental impact and health risks, but also their dissatisfaction with being excluded from the decision-making process. The governments of both cities eventually suspended their plans for Liulitun and Panyu and relocated the incinerators.

The relocation of the planned incinerators marked a victory for the protesters and revealed the increasing power and involvement of Chinese citizens in municipal-level waste policymaking processes. The responses of local governments to such protests have changed gradually. Against this backdrop, anti-incinerator activism in Liulitun is compared with that in Panyu by examining the relationship between environmental activism and environmental policy change at the local level. More importantly, this study focuses on why and how local governments respond to protests and examines the conditions under which concessions are made.

Protests against incinerators, especially their proposed siting, also reflect the persistent lack of public participation in environmental policymaking. The Chinese government has established an environmental impact assessment system, providing public hearings for citizens involved in environmental decision-making. However, citizen participation is limited by fragmented authoritarianism, under which local governments enjoy conditional autonomy and are responsible for local governance and tasks, such as local legislation and public policymaking. They may become the primary targets of protesters<sup>1</sup> when citizens' rights are violated. Local governments are often held responsible for citizens' grievances<sup>2</sup> and they have responded in different ways to minimize the political and economic costs of mounting protests, one of which involves policy change. The heightening level of environmental activism therefore sheds light on the responses of local governments.

Existing studies on environmentalism mainly focus on two topics in China: environmental policymaking and activism. Studies of environmental policymaking in China have frequently used the fragmented authoritarian model to explain policies in terms of outcomes of negotiations and compromises between conflicting state agencies.<sup>3</sup> However, the model may no longer provide adequate explanations for the complicated dynamics between state and non-state actors in the decision-making process.<sup>4</sup> Apart from policymaking on environmental issues, studies on social activism in China also focus on the patterns and limitations of activism and the evolution of Chinese civil society and democratization: the survival of 'green groups'; the rise of environmental protests among citizens; the limitations of environmental activism under an authoritarian Chinese government; and the inferior status of environmental authorities within the decentralized political structure.<sup>5</sup>

Scholarly explorations of the links between environmental activism and environmental policy change have almost exclusively been confined to cases from advanced industrialized democracies.<sup>6</sup> There is therefore a lack of such studies in the context of authoritarian regimes because these regimes usually suppress opposition. Disparities in environmental activism across Chinese provincial and local politics should also be

addressed.<sup>7</sup> Given that local governments enjoy a certain level of autonomy in decision-making, they often respond to environmental activism by introducing innovation or abolishing policy.<sup>8</sup> During policy adjustment, they focus on political and social openness at the local level.

Competing groups of protesters and governmental agencies also play a role in shaping public policy, which influences local governments' policy adjustment choices. Studies on political opportunity discuss variables that affect public policy on social activism.<sup>9</sup> The advocacy coalition framework explains the factors that affect policy change, and it also illustrates mechanisms through which actors can change policies within a public policy subsystem.

## **The advocacy coalition framework**

The advocacy coalition framework helps to explain the relationship between protests and policy change in the Chinese context. According to Paul Sabatier, who introduced this framework, policy actors operating from their belief systems form coalitions and compete with each other in policy subsystems. Coalitions, which have different policy belief systems, comprise actors from both public and private organizations (for instance, government officials, scientists, and the media) seeking consensus on major policy change.<sup>10</sup> The use of scientific and technological information is a precondition for policy change. A broader political environment comprising stable parameters and external factors will facilitate the formation of subsystems and increase their influence on policy change.<sup>11</sup>

Stable parameters concern basic social, cultural, economic, physical, and institutional structures in a policy subsystem. External subsystem factors such as socio-economic conditions, public opinion, and governing coalitions are both dynamic and prone to change.<sup>12</sup> A coalition opportunity structure either constrains or promotes the actions of coalitions and mediates the relationship between the stable parameters and external factors to reach consensus on a policy change.<sup>13</sup> Scholars have used coalition opportunity structures to explain how factors such as resources, institutional arrangements, and historical precedents shape interactions between policy actors and cause variations in policy change outcomes. Political openness interwoven into sociocultural structures is also relevant. Political openness refers to 'the possibility for organizations to participate formally in political procedures',<sup>14</sup> such that a variety of actors can engage without constraints in policymaking processes. A sociocultural structure reflects a country's economic development and political culture, including its history,<sup>15</sup> identity, and ideologies, all of which are formulated at the level of society.<sup>16</sup> Although coalition opportunity structures may change over time in different policy contexts, they provide insight into the complicated interactions between structure and agency during the policymaking process.<sup>17</sup>

Paul Sabatier and Christopher Weible argue that in an authoritarian regime the degree of consensus required for major policy change is low because of the relatively low level of political openness.<sup>18</sup> However, others contest the applicability of the advocacy coalition framework to a non-pluralist regime such as China.<sup>19</sup> They argue that this is a case of 'framework stretching', making it inapplicable in a different political context such as China's. Nevertheless, this framework has been applied to a number of cases of

environmental activism in China. The variables affecting environmental policy change and policy change mechanisms have not, however, been discussed in these cases.<sup>20</sup>

Although accessing information about China's policy process is fraught with difficulty, there are two reasons why the advocacy coalition framework can be used in this study. First, this framework is useful for showing the formation of policy coalitions and explaining policy change. Second, and more importantly, the outcomes in this study are expected to be applicable in other cases and will facilitate a better understanding of policy change in China. By examining political openness and changes in socio-economic conditions and sociocultural values which led to different outcomes in the two case studies, variations in local environmental management in *de facto* decentralized structures are revealed.

This study is based on semi-structured, in-depth qualitative interviews carried out in 2013 with key informants including protesters, journalists, environmental lawyers, street-level bureaucrats, academics, and staff of environmental NGOs engaged in anti-incinerator building projects in both Beijing and Guangzhou. The interview data were supplemented with an archival examination of documents, such as Internet documents released by the Chinese government, and newspapers, which provided background information for a better understanding of both cases. Government documents facilitated our understanding of decisions made by both central and local governments. These documents also served as counter-evidence to the assumptions made in this study. In addition, social media platforms such as online discussion forums provided a significant channel for collecting data related to organizing activism in Beijing and Guangzhou.

After introducing the advocacy coalition framework, including a discussion of the framework for explaining the relationship between protests and policy change in China, the rest of this article is structured as follows. First, anti-incinerator protests in Beijing and Guangzhou are discussed. The formation of coalitions and their beliefs and interactions are also identified in this section. Second, factors involved in policy change are examined by comparing both cases. Finally, the conclusion summarizes this article's findings and discusses the applicability of the advocacy coalition framework to different political regimes, such as authoritarian China.

## **Anti-incinerator activism in Beijing**

Liulitun is a community of 30,000 located in Haidian district (海淀区) in the north-western part of Beijing.<sup>21</sup> Several residential estates and schools are located in this community, and there is an aerospace town just 3 km away. In 2007, an incinerator was proposed for construction at a site about 800 km away from the surrounding poor villages and heavily polluting factories and 5 km away from several new middle-class residential areas. A landfill site was next to the planned incinerator site. On 29 August 2006, middle-class residents of the community learned of the plan for an incinerator on a homeowners' online forum,<sup>22</sup> which subsequently became a primary communication channel for their protest. This piece of information sparked discussion among the residents. One month later, the Beijing municipal government launched a one-month consultation exercise to collect opinions about preparations for the 2008 Olympic Games. Liulitun residents took the opportunity to send letters to the municipal government. They

expressed their worries about the odour from the landfill and incinerator but did not receive any response.

Public concern about the smell from the landfill attracted the attention of other parties. At the first plenum of the 8th Beijing Haidian District Chinese People's Political Consultative Conference (中国人民政治协商会议北京市海淀区委员会) held from 14 to 18 December 2006, members submitted two proposals to counter the effects of landfills on the health of citizens, the ecosystem, and district development, as well as to find a solution to get rid of the stench caused by the landfill and municipal waste disposal.<sup>23</sup>

In response to inquiries from members of the Beijing Haidian District Chinese People's Political Consultative Conference, the district government confirmed the construction of the incinerator by March 2007, but it promised that the landfill would be closed in 2010.<sup>24</sup> Homeowners were angry and planned to take action to oppose both the incinerator and landfill plans.<sup>25</sup>

The angry homeowners<sup>26</sup> launched a protest against the landfill and incinerator on 22 December 2006. They emphasized that the protest should occur within the current legal framework.<sup>27</sup> Protesters also used the mass media and met with other official agencies to express their grievances.

A few days later, protesters submitted a letter of complaint with 600 signatures to the State Environmental Protection Administration (国家环境保护总局, former Ministry of Environmental Protection) and Beijing Municipal Environmental Protection Bureau (北京市环保局). *Beijing Chamber* (北京议事厅), a current affairs television programme, reported that the mayor of Beijing, Wang Qishan, had met with Beijing Municipal People's Congress members on 30 December 2006. One of the members told the mayor about the odour produced by the landfill and questioned the purpose of the project given the residents' opposition. Wang replied that it was difficult to find an appropriate location for an incinerator because communities everywhere would oppose it and that there was no way to stop the increasing volumes of waste. He also pointed out that the government constantly monitored the effects of the landfill and incinerator on the local community.<sup>28</sup> His speech and response again aroused the dissatisfaction of homeowners who planned another protest.

The homeowners concerned organized an exhibition in the community from 1 to 3 January 2007. They exhibited posters illustrating the problems created by locating the incinerator in their community. They also collected more signatures for a petition and pledges of financial support from other homeowners. This activity was supported not only by the residents of the two residential estates but also by their property management company and other nearby estates. They also came to the attention of Lu Anhuai, a professor at Peking University and a member of the National Committee of the Chinese People's Political Consultative Conference (CPPCC) member, who promised to raise the issue during the CPPCC meeting.

On 17 January 2007, the district government invited representatives of the residents to attend a meeting about the incinerator project. The chief of the Beijing Municipal Commission of City Administration and Environment (北京市市政市容管理委员会), the directors of landfill and incinerator companies, and the chief of the Haidian Local Taxation Bureau also attended the meeting. The government also invited environmental

scientists to attend, and these scientists reiterated that incinerators were safe and effective in managing municipal waste. The chief of the Beijing Municipal Commission of City Administration and Environment divulged that the location of the incinerator had been chosen following the comprehensive plan in 2004. His speech aroused further anger from the residents, who were unhappy because the district government had not disclosed any information about the planned location before they had moved into the area. They decided to launch another petition.

The day after the meeting, the residents submitted complaint letters to various government agencies, including the Beijing Municipal Environmental Protection Bureau, the Beijing Municipal Commission of Urban Planning (北京市规划委员会), and the Office of Letters and Calls of the Beijing Committee of the Communist Party of China and the Beijing Municipal People's Government (中共北京市委北京市人民政府信访办公室). In the process of submitting the complaint letters to the Beijing Municipal Commission of Urban Planning, the residents discovered that a land use permit and administrative licence had already been issued for the incinerator project, but not a building permit. The residents hung banners opposing the building of an incinerator near their homes, but a day later the Beijing Municipal Bureau of City Administration and Law Enforcement (北京市城市管理综合行政执法局) ordered that the banners be removed.

Because of opposition to its plans for the incinerator, the district government held a post-protest press conference about the incinerator project. At the press conference, the government did not mention the project commencement date, but stated that it expected operations to begin in 2008. In addition, it emphasized that the incinerator would be safe.<sup>29</sup> The angry protesters conducted an opinion survey about the building of the incinerator in March. They also contacted a solicitor and environmental litigation expert, Xia Jun, for legal advice.

On 3 April 2007, the Beijing Municipal Environmental Protection Bureau sent a representative to defend its decision to build the incinerator. The decision had been made carefully according to legal procedures.<sup>30</sup> The government's response sparked another round of protest, and residents launched additional action against the incinerator. Liulitun Landfill (六里屯填埋场) held an open house to provide people with an opportunity to learn more about waste management operations and the technology used at the landfill. Three hundred residents took the opportunity to launch a campaign on the landfill site itself, holding a banner that said 'Opposing the building of the incinerator' and blocking the main entrance.<sup>31</sup> They also sent individual letters of complaint to the Deputy Chief of the State Environmental Protection Administration Pan Yue (who was in charge of environmental impact assessment), opposing the 3 April response to the Administrative Reconsideration Law (行政诉讼法) and asking for a re-evaluation of the effects of building the incinerator in Liulitun.<sup>32</sup> This time, their actions produced results. On 10 May 2007, the Beijing Municipal Commission of City Administration and Environment announced the postponement of the incinerator's construction due to the residents' opposition.<sup>33</sup>

The residents did not end their campaign there, but launched another rally on Earth Day (5 June). One thousand residents wore T-shirts emblazoned with the slogan 'Against the incinerator in Liulitun' and went to the offices of the State Environmental Protection Administration to demonstrate. Two days later, its deputy chief suggested

the postponement of the incinerator's construction,<sup>34</sup> following which an official announcement was made.

Anxiety surrounding the incinerator's construction disappeared temporarily, but it revived after the 2008 Olympic Games. SinaNews reported that the Haidian District City Municipal Management Committee (海淀区市政市容管理委员会) had chosen the location of the Liulitun incinerator and completed the first stage of the environmental impact assessment and that it would seek public opinion about the project. The district government planned to build a food-waste processing plant the following year.<sup>35</sup> This news again roused homeowners into action. They launched a petition in mid-October 2008 and sent letters to the mayor of Beijing and several governmental departments. The residents also visited the municipal government offices 10 times, but none of the governmental agencies responded to their request for a meeting.

On 19 February 2009, the residents launched a discussion forum. Dozens of residents attended the forum, and environmental scientists such as Zhao Yuanzhang, an expert in municipal waste management, were invited to speak and provide consultation. The forum primarily focused on the problems of waste burning and possible solutions for managing waste in the city. Zhao noted the challenges of burning waste in China, including deficient monitoring, multiple interests behind such projects, and non-comprehensive waste sorting. He encouraged the residents to continue their actions. In February 2009, they sent a petition letter with 10,000 signatures to the same government agencies they had previously contacted to express their dissatisfaction and to appeal to the district government to listen to the people's voice.<sup>36</sup> As a result, the Deputy Chief of the Haidian District City Municipal Management Committee met with protesters to discuss the building of the incinerator in Liulitun in July 2009. He denied that the location of the incinerator had already been confirmed and claimed that the agency was still assessing the risks of building an incinerator.<sup>37</sup>

A breakthrough came on 19 January 2011. The Haidian district government announced that a new location for the incinerator had been found in Sujiatuo (苏家坨), and that it had abandoned the plans for Liulitun.<sup>38</sup> The four-year campaign in Liulitun finally ended and the residents themselves disbanded the anti-incinerator group.

The significance of this protest was not lost on activists in other parts of China. It represented China's first anti-incinerator activism and the first time that the government had responded to citizens by relocating an incinerator.<sup>39</sup> Since then, anti-incinerator activism in Beijing has emerged in Gao'antun (高安屯) and Asuwei (阿苏卫), and in cities nationwide, including Guangzhou, Nanjing, and Shanghai.

In addition, the municipal government actively implemented measures after the protest with the intention of decreasing the city's volume of municipal waste. For example, there were trial waste-sorting programmes in dozens of communities. Although the local government halted construction on the incinerator in Liulitun in response to the residents' demands, governments elsewhere continue to manipulate waste management policies without public involvement. Citizens remain disadvantaged by a lack of channels (other than environmental impact assessment) through which they can participate in the waste management decision-making process. In addition, neither citizens nor environmental NGOs (ENGOS) can monitor the work of the government.

## Anti-incinerator activism in Guangzhou

Panyu, a highly urbanized district in the south-eastern part of Guangzhou, was the proposed site for an incinerator project. Several new residential complexes such as the Riverside Garden and the Clifford Estates and Huanan Country Garden<sup>40</sup> are located in this district, within 6 km of the proposed site for the incinerator. The closest residential area to the incinerator is just 1 km away. In February 2009, the Panyu district government posted its plan for the incinerator project on its official website with the expectation that construction would be completed in 2010. The proposal initially received little attention from local residents.<sup>41</sup>

In September 2009, Panyu residents came across a government website about plans for a waste incinerator power plant in Panyu. They posted the information on a major residential online discussion forum, the Jiangwaijiang forum (江外江论坛),<sup>42</sup> in an attempt to gather support to oppose the incinerator project. As news spread widely and quickly, several online discussion forums reposted the same protest messages against the building of the incinerator. From the information on the government website, Panyu residents learned that their district government had already proposed and approved the construction of a waste-to-energy incinerator in 2004 and that the Guangzhou Land Resources and Urban Planning Committee (广州市国土资源和规划委员会) had approved the location in 2006. This sequence of events showed that the government had not consulted the public between the implementation and approval stages. In the days that followed, Panyu residents met to study the effects of the incinerator and discussed whether or not to take action. One month later, in an effort to obtain public support, they took to the streets with a petition and distributed handbills about the problems associated with incinerators.

At the same time, local residents organized a visit to the Likeng waste-to-energy plant located in Baiyun district (白云区, a northern suburb of Guangzhou). The Likeng incinerators was the first in the city and the municipal government hailed it as an outstanding example.<sup>43</sup> However, Panyu residents discovered that the incinerator produced a noxious odour, and they expressed worries about the technology that was used.<sup>44</sup> They expressed their sympathy for the villagers living in Likeng and reiterated their belief that banning the Panyu incinerator project was necessary. They made a documentary *Who Can Save You, People of Likeng?* (谁来拯救你, 李坑人民) and uploaded it to the Internet to publicize the hazardous effects of incinerators.<sup>45</sup>

Some days later, a group of residents carrying a letter stating their concerns and signed by 1000 individuals visited the Guangzhou Municipal Bureau for Environment and Hygiene (广州市市容环境卫生局) (now a part of the Guangzhou Municipal Urban Management Committee 广州市城市管理委员会). In their letter, residents expressed their dissatisfaction with plans to build the incinerator without prior public consultation and requested that the project be cancelled. In the following days, the residents also visited the Panyu district government, the South China Institute of Environmental Sciences (环境保护部华南环境科学研究所, the agency responsible for performing the environmental impact assessment of the incinerator) and the Guangzhou Municipal Bureau of Gardens of Panyu District (广州市番禺区市政园林管理局, the agency responsible for choosing the location of the incinerator). In addition, the group of residents contacted



members of the CPPCC, the National People's Congress (NPC), and the mass media to seek their support.

On 25 October 2009, dozens of protesters wearing surgical masks and T-shirts bearing the slogan 'Against toxic air' collected signatures from the public at a supermarket entrance, with some protesters holding banners with words such as 'anti-burning' and 'anti-dioxin'. Their actions attracted the attention of the police, who arrested some protesters on the charge of 'alleged unlawful assembly'. A few days later, government representatives held a press conference at which both the municipal and district governments announced that they had not changed their position, and they emphasized the necessity of the incinerator in the district. This aroused anger among Panyu residents. The following morning, 1000 residents 'strolled' with banners to the headquarters of the municipal government and the Guangzhou Municipal Bureau for Environment and Hygiene, where they shouted slogans and sang the national anthem.<sup>46</sup> Although the local police were present and the protesters posted their banners on their patrol cars, the officers remained on standby and did not take further action. After lunch, municipal government officials suggested that the protesters select a representative to allow for better communication. This suggestion was rejected by the protesters, who shouted that they were representing themselves. At 2 p.m., the protesters dispersed peacefully.

In the face of such opposition, the government attempted to change its position on the building of the incinerator. A breakthrough came on 10 December, two weeks after the 'stroll'. The district government announced that the construction of the planned incinerator would be postponed until 2011 (one year after the 2010 Asian Games, of which Guangzhou was the host). The district government simultaneously released a document about waste management solutions and sought public opinion. Finally, the party secretary of the district was invited to attend a meeting with the residents of Riverside Garden on 20 December 2009. During the meeting, the party secretary announced that the project had been suspended due to mass opposition, that public opinion on waste management would be considered in the future and that a feasibility study on introducing waste sorting in a small residential community would be conducted.<sup>47</sup> The four-month campaign by activists had finally reached its conclusion.

A few months after the suspension of the incinerator project, Eco-Canton (宜居广州), a green group in Guangzhou formed by activists, mobilized themselves and demonstrated the determination and will to uphold their fight on behalf of those supporting zero waste. This green group advocated waste recycling in local communities and believed that such a plan would result in a fundamental change in municipal waste management in Guangzhou. Seventy families joined the waste-sorting action in Riverside Garden.

At the same time, the group recognized that assistance from a professional ENGO was essential for the functioning and success of Eco-Canton. At the conclusion of the anti-incinerator activist efforts in 2009, one of the founders of Eco-Canton, Luo Jingming (Internet pseudonym 巴索风云), travelled to Beijing, where he met Zhang Boju, the Chief Executive Officer of Friends of Nature (自然之友), a Beijing-based ENGO and the oldest environmental grass-roots movement in China, to exchange information about campaigning and waste management experience. Since 2008, Friends of Nature have been assisting the residents of Liulitun in their anti-incinerator campaign by launching

community recycling projects. Thus, Eco-Canton had an opportunity to learn from its experiences.<sup>48</sup>

With help in funding, knowledge, and human resources from Friends of Nature, Eco-Canton became more institutionalized and registered as an NGO with the Bureau of Civil Affairs of Guangzhou Municipality (广州市民政局) in June 2012.

In the meantime, Guangzhou's government suspended the incinerator project in December 2009 and implemented a series of new instruments for municipal waste management, such as plans to promulgate waste-sorting regulations in Guangzhou.<sup>49</sup> After the protests, the mayor learned to improve communication with the citizens in solving municipal waste issues and instituted a participatory mechanism in the policymaking process: the Guangzhou Public Consultation and Supervision Committee for Urban Waste Management (广州市城市废弃物处理公众咨询监督委员会) was established under the Municipal Urban Management Committee in August 2012.<sup>50</sup> The new committee was composed of 19 people from different sectors of society who were selected by the Municipal Urban Management Committee, including citizen representatives, business representatives and representatives of social organizations. In addition, the 11 members of the expert group were selected from within the recycling industry and from various universities and professional institutes. One of the leaders in the anti-incinerator campaign, Eco-Canton founder and CEO Luo Jingming, was a member of this committee in both the first and second cohorts.

After the establishment of the consultative committee, its members actively engaged in promoting waste management in Guangzhou. Members discussed waste management solutions and made suggestions, such as waste charging, to the municipal government in an April 2013 meeting. Moreover, the Guangzhou government launched two public forums on municipal waste management to discuss effective measures for managing waste in the city and the prospects of waste sorting. The local government had apparently learned about the importance of listening to the public to maintain both social stability and the legitimacy of rule.

## Discussion

Conflicts between the 'pro-burn' and 'anti-burn' coalitions for and against incineration have contributed to the decision of the governments of Beijing and Guangzhou to suspend and relocate the proposed incinerator plants. These are considered successful cases of anti-incinerator activism. A comparison of these two cases reveals two possible explanations for the policy change concerning the construction of incinerators in the two cities: policy-oriented learning and external shocks.

As suggested by the advocacy coalition framework, the competing coalitions sought consensus by providing new information for policy revisions.<sup>51</sup> In both cases discussed here, opposition to the building of incinerators in nearby communities laid the ground for protests. In these communities, the residents had good educational and professional backgrounds, including journalists, teachers, and business executives. They were highly aware of their rights, and through their personal networks they formed coalitions against the construction of incinerators. Many among the protesters were retired cadres, civil servants, and journalists with access to various channels of communication with higher

levels of authority, NPC and CPPCC members, and the mass media, through which they could mobilize help and support for their protest. For example, the *Southern Metropolis Daily* (南方都市报), a Guangzhou-based newspaper, widely reported the controversies associated with the construction of incinerators and municipal waste management because most of their journalists lived in Riverside Garden, one of the residential complexes affected by the Panyu incinerator plan. The news increased discussions about waste management and it pressured the local government to take further action.

In addition to personal networks and the mass media, cyberspace played a crucial role in the cases of activism under study here. Despite tighter laws and policies to monitor Internet use, activists continue to use the Internet. In the two case studies, the campaigns largely relied on online forums to recruit volunteers and discuss their plans. These online forums, such as the homeowners' online forum, supported information exchange between homeowners in the residential complexes. In addition, SinaWeibo-based advocacy gained the support of many citizens for the homeowners' actions and provided opportunities for the public to engage in discussions. Because of the likelihood of monitoring and suppression by the authorities (who deleted sensitive messages or removed webpages), the protesters had to post their messages carefully or resort to tactics to avoid detection.

The protesters acquired the technical and legal knowledge necessary to counter top-down information presented by the government and incinerator experts. This makes them 'citizen experts', as they are commonly known in campaigns. Citizen experts study the environmental cost of government decisions.<sup>52</sup> In the case studies, Panyu residents organized and learned from a visit to the Likeng waste-to-energy plant so that they could better understand the effects of incineration on the health of the local populace. Some protesters, such as Luo Jingming, visited Beijing and met with both Liulitun residents and Zhang Boju, the chief executive of Friends of Nature, to learn about their activism tactics.<sup>53</sup> Both Liulitun and Panyu residents acquired legal and technical knowledge through self-study and from legal and scientific experts, which helped them defend their rights and counter the information provided by the government and incinerator operators. Furthermore, residents presented the findings of comprehensive studies to gain public support and increase their bargaining power with the government. For their litigation process, the residents of Liulitun collected evidence of the problems associated with incineration. They also learned about landfills and waste management so that they could determine whether their municipal government had violated national pollution control standards. After the protest, Panyu residents used their knowledge in the newly formed ENGO, Eco-Canton, to launch municipal waste education and advocacy work. In his discussion of Beijing residents in their activism against incinerators, Thomas Johnson commented that they adopted a depoliticized strategy to promote a recycling society and they portrayed themselves 'as concerned citizens supportive of the public interest'.<sup>54</sup>

Because of the increasing amount of municipal waste that both Beijing and Guangzhou have had to process, their governments sought the most effective solution to waste management. Both governments considered incineration to be an alternative solid waste management strategy in their cities and decided to implement incineration projects. In the face of pressure from residents and other parties such as local NPC members and the mass media, the district governments formed coalitions with scientists and sub-governmental

agencies to defend incineration technology. The municipal-led pro-burn coalitions held several press conferences and responded to questions from anti-burn coalitions. The Beijing and Guangzhou governments initially maintained their positions on the building of the incinerators, and officials relied on scientific data to emphasize the safety of incineration technology. But in the face of protests, both local governments made concessions to minimize costs, political (e.g. social stability and signs of weakness in local governance) and economic. Thus, both the Beijing and Guangzhou governments chose to make concessions and meet the demands of citizens.

After both governments had suspended the projects, more measures were implemented to solve the cities' municipal waste problems. The Beijing municipal government promulgated the Regulations on Domestic Waste Management in Beijing Municipality (北京市生活垃圾管理条例) in November 2011, and waste charges were proposed. The Guangzhou government used similar measures. Moreover, the Guangzhou government established pilot points for waste sorting in Guangzhou, and it organized public forums related to municipal waste management. The government invited experts and the public to discuss effective measures for managing waste in the city and the possibilities for waste sorting.

The setting up of the Guangzhou Public Consultation and Supervision Committee for Urban Waste Management of Guangzhou City (consultative committee) cast a spotlight on the policymaking processes in authoritarian China. The consultative committee was attached to an agency known as the Municipal Urban Management Committee. Members of the consultative committee engaged in discussions with both experts and the public. The committee was considered a landmark achievement in urban management and governance, because the municipal government appeared to have learned the importance of listening to the public on environmental management.

Overall, both cases of activism in Beijing and Guangzhou were successful in pressuring local governments to suspend the incinerator projects. However, the outcomes differed. Panyu residents went on to promote a zero-waste society and influenced government decisions by forming an ENGO, but Liulitun residents did not take any further action after the actual protest. In addition to learning about policy, external factors caused a difference in the outcomes of incinerator building policies in Beijing and Guangzhou. The variation in policy outcomes is attributable to the *de facto* decentralized structure of China. The political environment of Guangdong Province has led the Guangzhou government to implement this new participatory mechanism. The historical background and geographical location of the city initially provided an open political environment which remained the same during economic reform in the late 1970s. Indeed, the province was a 'testing ground' for China's economic reforms, which had implications for the mode of government. In terms of political development, the government of Guangzhou, the capital city of Guangdong Province, has been a model of administrative reform for other governments in China, for example in legal reform and foreign investment.<sup>55</sup>

The degree of political openness of the Guangzhou government made it possible for the government to implement a participatory mechanism. As mentioned previously, coalition opportunity structures explain the dynamics between social movements and the state, and the degree of political openness affects the development of social movements.<sup>56</sup> The Guangzhou government's open political opportunity structure obviously allows

groups of citizens to participate in mechanisms such as the consultative committee and to affect decision-making on environmental issues.

Besides political openness, the new participatory mechanism introduced by the Guangzhou government has facilitated active civic engagement and public involvement. Voluntary groups and activists in Guangzhou are the most developed in China.<sup>57</sup> Guangzhou is 'a place of social activism' where people defend their rights enthusiastically.<sup>58</sup> In contrast, Beijing has stricter criteria for registering social organizations (half of the NGOs in Beijing are registered as business entities under business regulations, which is an easier means of obtaining legal status) and a 'thick' political atmosphere. Political caution exercised by both Beijing's municipal bureaucrats and citizens has not led to any significant change in the relationship between local government and civil society organizations.<sup>59</sup> This situation was also apparent in the Beijing case study, where the municipal government maintained 'collaborative relations' with civil society organizations as part of its waste management policy, which is to say that while the municipal government welcomed the assistance of green groups to promote recycling, it did not provide a participatory mechanism for decision-making processes.

In Guangzhou, consultative committees, which allow ordinary citizens to become involved in decision-making, are an innovative attempt in the Chinese policymaking arena. To some extent, this institutionalized organization has both solved social disputes and enhanced communications between citizens and local government. The Guangzhou local government's open political structure and Guangzhou's active civic engagement account for this policy adjustment in Guangzhou. Allowing Eco-Canton's registration despite its status as a former protest group is another example of the political openness of the Guangzhou government.

In summary, the interaction between coalitions in incinerator-building debates and external factors seems to have resulted in the suspension of the proposed incinerator construction. Two external factors also affected policy change: political openness and sociocultural structures. These factors have encouraged the establishment of a participatory mechanism for waste management. These changes in waste management policy also show that policy actors have the ability to seek consensus for major policy change in an authoritarian regime like China.

## Conclusion

This study adopted the advocacy coalition framework to examine the decision-making processes that led to policy change, and it has looked into the relationship between environmental protest and policy change in China, particularly at the municipal level. The two cases of anti-incinerator protests in Beijing and Guangzhou advance our understanding of the political interaction between local governments and protesting groups as well as of influences that impact on the commitment of local governments to municipal waste management. Scholars have deployed coalition opportunity structures to explain how certain factors such as resources, institutional arrangements, and historical precedents shape the interactions between government and activists and affect protest outcomes.<sup>60</sup> Although coalition opportunity structures may change over time and vary according to

policy context, they can help us understand the various interactions between structures and agencies because they relate to protests and their outcomes. This study also examined the significance and interwoven nature of political openness and sociocultural structures. Both pro- and anti-burn groups were formed in Beijing and Guangzhou to influence policymaking processes and to seek consensus for policy change.

Having said that, the advocacy coalition framework can be generalized and applied to non-pluralist regimes.<sup>61</sup> Chinese citizens' shared grievances and the growth of collective resistance have led to questions about conflict resolution between the state and citizens. The findings of this study reveal that local governments' efforts to build conflict-resolution mechanisms are highly significant developments in the Chinese public policy research.

## Notes

1. Yongshun Cai, *Collective Resistance in China: Why Popular Protests Succeed or Fail*, Stanford, CA: Stanford University Press, 2010, 4; Kevin J. O'Brien and Rachel E. Stern, Introduction: Studying contention in contemporary China, in Kevin J. O'Brien (ed.) *Popular Protest in China*, Cambridge, MA: Harvard University Press, 2008, 12.
2. Cai, *Collective Resistance in China*, 4.
3. Kenneth Lieberthal, China's governing system and its impact on environmental policy implementation, *China Environment Series* 1, 1997, 3–8, <https://www.wilsoncenter.org/sites/default/files/CES%201%20Part%202.pdf>, accessed 11 February 2016; Barbara J. Sinkule and Leonard Ortolano, *Implementing Environmental Policy in China*, Westport, CT and London: Praeger, 1995.
4. Andrew Mertha, 'Fragmented authoritarianism 2.0': Political pluralization in the Chinese policy process, *The China Quarterly* 200, 2009: 996–8.
5. Andrew Mertha, Society in the state: China's nondemocratic political pluralization, in Peter Hays Gries and Stanley Rosen (eds) *Chinese Politics: State, Society and the Market*, London and New York: Routledge, 2010, 69–84; Guobin Yang, Contention in cyberspace, in O'Brien (ed.) *Popular Protest in China*, 126–43; Minxin Pei, *China's Trapped Transition: The Limits of Developmental Autocracy*, Cambridge, MA: Harvard University Press, 2009; and Rebecca MacKinnon, Liberation technology: China's 'networked authoritarianism', *Journal of Democracy* 22(2), 2011: 32–46.
6. Robert D. Bullard and Glenn S. Johnson, Environmental justice: Grassroots activism and its impact on public policy decision making, *Journal of Social Issues* 56(3), 2000: 555–78; Christopher A. Rootes, The transformation of environmental activism: Activists, organizations and policy-making, *Innovation: The European Journal of Social Science Research* 12(2), 1999: 155–73.
7. Fengshi Wu, Environmental activism in provincial China: Comparative evidence from Guangdong and Guangxi, *Journal of Environmental Policy and Planning* 15(1), 2013: 89–108.
8. Cai, *Collective Resistance in China*, 4.
9. Herbert P. Kitschelt, Political opportunity structures and political protest: Anti-nuclear movements in four democracies, *British Journal of Political Science* 16(1), 1986: 57–85; Sidney Tarrow, *Power in Movement: Social Movements and Contentious Politics*, New York: Cambridge University Press, 2011; and Hanspeter Kriesi, The political opportunity structure of new social movements: Its impact on their mobilization, in J. Craig Jenkins and Bert Klandermans (eds) *The Politics of Social Protests: Comparative Perspectives on States and Social Movements*, London: UCL Press, 1995, 83–98.

10. Edella Schlager, Policy making and collective action: Defining coalitions within the advocacy coalition framework, *Policy Sciences* 28(3), 1995: 243–70.
11. Paul A. Sabatier (ed.), *Theories of the Policy Process*, 2nd edn., Boulder, CO: Westview Press, 2007; Hank C. Jenkins-Smith et al., Advocacy coalition framework: Foundations, evolution, and ongoing research, in Paul A. Sabatier and Christopher M. Weible (eds) *Theories of the Policy Process*, 3rd edn., Boulder, CO: Westview Press, 2014, 183–224; and Christopher M. Weible, Paul A. Sabatier, and Kelly McQueen, Themes and variations: Taking stock of the advocacy coalition framework, *Policy Studies Journal* 37(1), 2009: 121–40.
12. Jenkins-Smith et al., Advocacy coalition framework.
13. Sabatier (ed.), *Theories of the Policy Process*, 199; Weible, Sabatier, and McQueen, Themes and variations, 123.
14. Tammy Lewis, Transnational conservation movement organizations: Shaping the protected area systems of less developed countries, *Mobilization: An International Quarterly* 5(1), 2000: 103–21.
15. Sabatier (ed.), *Theories of the Policy Process*, 204; William A. Gamson and David S. Meyer, Framing political opportunity, in Doug McAdam, John D. McCarthy, and Mayer N. Zald (eds) *Comparative Perspectives on Social Movements: Political Opportunities, Mobilizing Structures, and Cultural Framings*, Cambridge: Cambridge University Press, 1996, 279.
16. Ann Swidler, Cultural power and social movements, in Hank Johnston and Bert Klandermans (eds) *Social Movements and Culture*, Minneapolis: University of Minnesota Press, 1995, 30.
17. Heejin Han, Brendon Swedlow, and Danny Unger, Policy advocacy coalitions as causes of policy change in China?: Analyzing evidence from contemporary environmental politics, *Journal of Comparative Policy Analysis: Research and Practice* 16(4), 2014: 313–34.
18. Jenkins-Smith et al., Advocacy coalition framework, 201.
19. Han, Swedlow, and Unger, Policy advocacy coalitions as causes of policy change in China?
20. Wanxin Li, Advocating environmental interests in China, *Administration & Society* 44(6S), 2012: 26–42; Maria Francesch-Huidobro and Qianqing Mai, Climate advocacy coalitions in Guangdong, China, *Administration & Society* 44(6S), 2012: 43–64.
21. Haidianqu di liu ci quanguo renkou pucha lingdao xiaozu bangongshi (Haidian district leading team office for the sixth national population census) et al., Haidianqu 2010 nian di liu ci quanguo renkou pucha zhuyao shuju gongbao (Announcement of the main data from the sixth national population census, Haidian district, 2010), 20 June 2010, [http://www.hdtjj.gov.cn/HDTJJWEB/rkpc6/S\\_38920.html](http://www.hdtjj.gov.cn/HDTJJWEB/rkpc6/S_38920.html), accessed 10 August 2013.
22. Tan fanglunshi luntan (Discussion forum on the real estate market), <http://house.focus.cn/msglist/>, accessed 11 February 2013.
23. Two proposals were written and forwarded by the Jiusan Society (Jiusan xueshe) and the Revolutionary Committee of the Chinese Kuomintang (Zhongguo Guomindang geming weiyuanhui). They are non-communist parties and have accepted the multi-party cooperative led by the Chinese Communist Party. See Non-communist parties in China, ChinaCulture.org, [http://www1.chinaculture.org/library/2008-02/14/content\\_22254\\_2.htm](http://www1.chinaculture.org/library/2008-02/14/content_22254_2.htm), accessed 11 August 2013; and Revolutionary Committee of the Chinese Kuomintang, 18 October 2013, <http://www.minge.gov.cn/mgzy/mgjj/201310/f516dcfa9c3a41919bafceff31d732e8.shtml>, accessed 11 August 2013.
24. Wang Qing, Haidianqu zhengfu huiying weiyuan: Liulitun laji chuli jiang jian fenshaochang (Haidian district government replies to [CPPCC] members: Plan to build an incinerator in Liulitun for waste management), 15 December 2006, <http://cppcc.people.com.cn/GB/34952/5172640.html>, accessed 11 August 2013.
25. Zhonghai fenglian shanzhuang yezhu luntan (Zhonghai fenglian mountain villa owners forum), <http://house.focus.cn/msglist/1396/>, accessed 11 August 2013.

26. These homeowners lived in residential estates in Liulitun which is near the Zhongguancun software park. The estates, Zhonghai fenglian mountain villa and Baiwang moli yuan were built in 2005. Zhonghai fenglian mountain villa accommodates 1245 households and Baiwang moli yuan (Baiwang jasmine garden) has 2000 households.
27. Guanyu jianli laji fenshaochang shiyi! (About the building of the incinerator!), Zhonghai fenglian shanzhuang yezhu luntan (Zhonghai fenglian mountain villa owners forum), 20 December 2006, <http://house.focus.cn/msgview/1396/71767106.html>, accessed 11 August 2013.
28. Tian Lei, Liulitun laji dianchang 'jiaoting' zhihou (After the building of the Liulitun waste-to-energy incinerator was 'halted'), Zhongguo huanbao lianmeng (Environmental protection union), 14 March 2008, <http://www.epuncn.com/huanbao/5157.htm>, accessed 12 August 2013.
29. Guo Shaofeng, Liulitun laji fenshaochang youwang mingnian yun[xing] (Liulitun incinerator expected to operate next year), 24 January 2007, <http://news.163.com/07/0124/05/35J1VTJ30001124J.html>, accessed 12 August 2013.
30. Beijingshi Huanbaoju dui women tichu de xingzheng fuyi de dabianshu (The Beijing Municipal Environmental Protection Bureau's written defence in response to the administrative reconsideration we submitted earlier), Zhonghai fenglian shanzhuang yezhu luntan (Zhonghai fenglian mountain villa owners forum), 3 April 2007, <http://bjmsg.focus.cn/msgview/1396/80067659.html>, accessed 13 August 2013.
31. Wang Qing, Jumin chi biaoyu yaoqiu ting jian laji fenshaochang (Residents held banners against the construction of the incinerator), 15 April 2007, <http://news.sina.com.cn/s/2007-04-15/013812779589.shtml>, accessed 13 August 2013.
32. Ma Jinyong, Liulitun fenshaochang yin zhengyi (The Liulitun incinerator leads to controversy), *Jinghua shibao* (Beijing times), 18 April 2007, A03, [http://epaper.jinghua.cn/html/2007-04/18/content\\_107002.htm](http://epaper.jinghua.cn/html/2007-04/18/content_107002.htm), accessed 13 August 2013.
33. Beijing Liulitun laji fenshao dianchang kaigong yanqi (The construction of the Beijing Liulitun incinerator has been postponed), 10 May 2007, <http://gb.cri.cn/14714/2007/05/10/1062@1581106.htm>, accessed 13 February 2013.
34. Wang Chin-chih, Beijing fan laji fenshao fadianchang kangzheng zhi anli fenxi (Anti-incinerator activism in Beijing: A case study), 2013, [http://140.119.184.164/award\\_pdf/11.pdf](http://140.119.184.164/award_pdf/11.pdf), accessed 13 February 2016.
35. Sun Ying, Liulitun laji fenshaochang wancheng huanping shouxu (The environmental impact assessment of the Liulitun incinerator has been completed), 9 October 2008, <http://news.sina.com.cn/c/2008-10-09/133014550306s.shtml>, accessed 13 August 2013.
36. Interview with a resident in Beijing, 26 August 2013.
37. Du Ting, Beijing Liulitun laji fenshaochang yin minzhong fandui jiang lingxing xuan xinzhì (The Beijing Liulitun incinerator will move to a new location due to mass opposition), 4 February 2010, <http://www.chinanews.com/sh/news/2010/02-04/2108339.shtml>, accessed 14 August 2013.
38. Compared with the incinerator project in Liulitun, there was little opposition in Sujiatuo because the location was far from any residential area. The incinerator was expected to be completed in June 2015. See Beijingshi Haidianqu xunhuan jingji chanyeyuan zaisheng nengyuan fadianchang xiangmu (Sujiatuo laji fenshaochang) (Jinzhān 4) (Beijing, Haidian district circular economy industrial park renewable energy power plant projec (Sujiatuo incinerator) (stage 4)), Zhongguo jianshe zhaobiao wang (Website for construction bidding in China), <http://www.jszhaobiao.com/projectdetail/27806011.html>, accessed 8 May 2014; Chen Yuanyuan, 4 nian li Liulitun laji fenshaochang jianshe fenzheng buduan, zhengfu chongqi gongzhong canyu chengxu (After four years of continuous dispute over the



- construction of the Liulitun incinerator, the government restarts public participation procedures), 2 March 2011, <http://www.bjelf.com/news/bencandy.php?fid=47&aid=701&page=1>, accessed 14 August 2013.
39. Angel Hsu, China's 12th Five-Year Plan lays out ambitious blueprint, but data challenges remain, Yale Center for Environmental Law & Policy, 31 August 2011, <http://environment.yale.edu/envirocenter/post/chinas-12th-five-year-plan-lays-out-ambitious-blueprint-but-data-and-m/>, accessed 30 August 2014.
  40. Most of the residents living in these complexes are government officials, businessmen, teachers and journalists. There are 40,000 households in Riverside Garden. The complex is home to most of the journalists working for the *Southern Metropolis Daily* (Nanfang dushibao), a Guangzhou-based tabloid considered the most 'outspoken' newspaper in China. There was intensive interaction between journalists and activists during this anti-incinerator campaign. See Guo Weiqing and Chen Xiaoyun, Fengxian shehui de huanjing yiyi: Yi Guangzhou shimin fandui laji fenshaochang jianshe weili (Environmental dissent in risk society: Taking as an example the mass opposition of Guangzhou citizens to the construction of an incinerator), *Gonggong xingzheng pinglun* (Journal of public administration), no. 1, 2011: 101–2.
  41. Guo and Chen, Fengxian shehui de huanjing yiyi.
  42. Jiangwaijiang, Lijiang huanyuan shequ luntan (Jiangwaijiang: Lijiang garden community forum), <http://www.rg-gd.net/forum.php?mod=forumdisplay&fid=12>, accessed 2 February 2016.
  43. Bi Zimo, Redian: Laji fenshao fadianchang, huanjing, jumin de quanli (Hot topic: Waste-to-energy incinerators, the environment, and rights of residents), 15 January 2010, [http://www.rfa.org/cantonese/features/hottopic/rights\\_resident\\_pollution-01152010132211.html](http://www.rfa.org/cantonese/features/hottopic/rights_resident_pollution-01152010132211.html), accessed 29 February 2016.
  44. Chen Jianjie, Likeng laji fenshao fadianchang fujin bufen cunmin siyu aizheng (Cancer deaths found near the Likeng waste-to-energy incinerator), 26 November 2009, [http://news.sina.com.cn/c/sd/2009-11-26/111519132701\\_2.shtml](http://news.sina.com.cn/c/sd/2009-11-26/111519132701_2.shtml), accessed 1 December 2013.
  45. Guo and Chen, Fengxian shehui de huanjing yiyi.
  46. Liu Gang and Zhou Hualei, Guangzhou: 'Sanbu', yi huanbao zhi ming (Guangzhou: 'Taking a stroll', in the name of environmental protection), *Zhongguo xinwen zhouban* (China news-week), no. 44, 2009, <http://magazine.sina.com/bg/chinanewsweek/2009044/2009-12-07/ba80275.html>, accessed 1 December 2013.
  47. Panyu laji fenshaochang yi tingjian, huanping xu min'ganqu qunzhong 75% yishang tongyi cai tongguo (Construction of the Panyu incinerator has been suspended, at least 75% of mass consent from the sensitive area is required for passing the environmental impact assessment), 21 December 2009, <http://www.boxun.com/news/gb/china/2009/12/200912212012.shtml>, accessed 1 December 2013.
  48. Interview with Zhang Boju, Friends of Nature Beijing, 26 August 2013.
  49. Zhang Yuqin, Guangzhou laji fenlei jiang youfa keyi (Waste sorting in Guangzhou will be regulated by law), 26 January 2010, <http://www.chinanews.com/ny/news/2010/01-26/2091751.shtml>, accessed 3 December 2013; Lai Weihang, Guangzhou laji fenlei dong zhen'ge: Donghujie shixing shoubian shoumailao (Guangzhou's waste sorting is becoming serious: Donghu Street tries using rag-and-bone men), 25 January 2010, [http://news.dayoo.com/guangzhou/201001/25/73437\\_11861975.htm](http://news.dayoo.com/guangzhou/201001/25/73437_11861975.htm), accessed 3 December 2013).
  50. Lan Zhixin, Laji chuli wen minyi Guangzhou jiang she gongzhong zixun jiandu weiyuanhui (Guangzhou will set up a public consultation and supervision committee to collect public opinion on waste management), 20 June 2012, <http://finance.sina.com.cn/roll/20120620/014412356140.shtml>, accessed 31 August 2015.
  51. Sabatier (ed.), *Theories of the Policy Process*.

52. Sylvia N. Tesh, Citizen experts in environmental risk, *Policy Sciences* 32(1), 1999: 39–58.
53. Interview with Luo Jingming in Guangzhou, 11 April 2014.
54. Thomas Johnson, The politics of waste incineration in Beijing: The limitations of a top-down approach?, *Journal of Environmental Policy & Planning* 15(1), 2013: 109–28.
55. Tang Yingwu and Li Jiangtao (eds), *Guangzhou lanpishu: Zhongguo Guangzhou shehui fazhan baogao (2010)* (Blue book of Guangzhou: Annual report on social development of Guangzhou in China (2010)), Guangzhou: Social Sciences Academic Press, 2010.
56. Lewis, Transnational conservation movement organizations.
57. Anthony J. Spires, Lin Tao, and Kin-man Chan, Societal support for China's grassroots NGOs: Evidence from Yunnan, Guangdong, and Beijing, *The China Journal*, no. 71, 2014: 65–90.
58. Zhu Jiangang, Guangzhou: Zui ju gongmin shehui qixiang de dushi (Guangzhou: A city with the most vibrant civil society), 12 October 2010, <http://maizhi2010.blog.163.com/blog/static/13589228920109126648879/>, accessed 30 August 2014.
59. Spires, Tao, and Chan, *Societal support for China's grassroots NGOs*.
60. Sabatier (ed.), *Theories of the Policy Process*.
61. Han, Swedlow, and Unger, Policy advocacy coalitions as causes of policy change in China.

## References

- Beijing Liulitun laji fenshao dianchang kaigong yanqi (The construction of the Beijing Liulitun incinerator has been postponed) (2007) 10 May. <http://gb.cri.cn/14714/2007/05/10/1062@1581106.htm>, accessed 13 February 2016.
- Beijingshi Haidianqu xunhuan jingji chanyeyuan zaisheng nengyuan fadianchang xiangmu (Sujiatuo laji fenshaochang) (Jinzhao 4) (Beijing, Haidian district circular economy industrial park renewable energy power plant project) (Sujiatuo incinerator) (stage 4)) (n.d.) Zhongguo jianshe zhaobiaowang (Website for construction bidding in China). <http://www.jszhaobiao.com/projectdetail/27806011.html>, accessed 8 May 2014.
- Beijingshi Huanbaoju dui women tichu de xingzheng fuyi de dabianshu (The Beijing Municipal Environmental Protection Bureau's written defence in response to the administrative reconsideration we submitted earlier) (2007) Zhonghai fenglian shanzhuang yezhu luntan (Zhonghai fenglian mountain villa owners forum). 3 April. <http://bjmsg.focus.cn/msgview/1396/80067659.html>, accessed 13 August 2013.
- Bi, Zimo (2010) Redian: Laji fenshao fadianchang, huanjing, jumin de quanli (Hot topic: Waste-to-energy incinerators, the environment, and rights of residents). 15 January. [http://www.rfa.org/cantonese/features/hottopic/rights\\_resident\\_pollution-01152010132211.html](http://www.rfa.org/cantonese/features/hottopic/rights_resident_pollution-01152010132211.html), accessed 29 February 2016.
- Bullard, Robert D. and Johnson, Glenn S. (2000) Environmental justice: Grassroots activism and its impact on public policy decision making. *Journal of Social Issues* 56(3): 555–78.
- Cai, Yongshun (2010) *Collective Resistance in China: Why Popular Protests Succeed or Fail*. Stanford, CA: Stanford University Press.
- Chen, Jianjie (2009) Likeng laji fenshao fadianchang fujin bufen cunmin siyu aizheng (Cancer deaths found near the Likeng waste-to-energy incinerator). 26 November. [http://news.sina.com.cn/c/sd/2009-11-26/111519132701\\_2.shtml](http://news.sina.com.cn/c/sd/2009-11-26/111519132701_2.shtml), accessed 1 December 2013.
- Chen, Yuanyuan (2011) 4 nian li Liulitun laji fenshaochang jianshe fenzheng buduan, zhengfu chongqi gongzhong canyu chengxu (After four years of continuous dispute over the construction of the Liulitun incinerator, the government restarts public participation procedures). 2 March. <http://www.bjelf.com/news/bencandy.php?fid=47&aid=701&page=1>, accessed 14 August 2013.
- Du, Ting (2010) Beijing Liulitun laji fenshaochang yin minzhong fandui jiang lingxing xuan xin-zhi (The Beijing Liulitun incinerator will move to a new location due to mass opposition).

- 4 February. <http://www.chinanews.com/sh/news/2010/02-04/2108339.shtml>, accessed 14 August 2013.
- Fainstein, Susan S. and Hirst, Clifford (1995) Urban social movements. In: Judge, David, Stoker, Gerry, and Wolman, Harold (eds) *Theories of Urban Politics*. London: Sage, 181–204.
- Francesch-Huidobro, Maria and Mai, Qianqing (2012) Climate advocacy coalitions in Guangdong, China. *Administration & Society* 44(6S): 43–64.
- Gamson, William A. and Meyer, David S. (1996) Framing political opportunity. In: McAdam, Doug, McCarthy, John D., and Zald, Mayer N. (eds) *Comparative Perspectives on Social Movements: Political Opportunities, Mobilizing Structures, and Cultural Framings*. Cambridge: Cambridge University Press, 275–90.
- Guanyu jianli laji fenshaochang shiyi! (About the building of the incinerator!) (2006) Zhonghai fenglian shanzhuang yezhu luntan (Zhonghai fenglian mountain villa owners forum), 20 December. <http://house.focus.cn/msgview/1396/71767106.html>, accessed 11 August 2013.
- Guo, Shaofeng (2006) Beijing Haidianqu Liulitun laji tianmaichang echou xunren zao piping (The foul smell from Beijing Haidian district Liulitun's landfill site is being criticized). 15 December. <http://news.sohu.com/20061215/n247056064.shtml>, accessed 11 August 2013.
- Guo, Shaofeng (2007) Liulitun laji fenshaochang youwang mingnian yun[xing] (Liulitun incinerator expected to operate next year). 24 January. <http://news.163.com/07/0124/05/35J1VTJ30001124J.html>, accessed 12 August 2013.
- Guo, Weiqing and Chen, Xiaoyun (2011) Fengxian shehui de huanjing yi: Yi Guangzhou shimin fandui laji fenshao fenshaochang jianshe weili (Environmental dissent in risk society: Taking as an example the mass opposition of Guangzhou citizens to the construction of an incinerator). *Gonggong xingzheng pinglun* (Journal of public administration), no. 1: 101–2.
- Guowuyuan Bangongting (General Office of the State Council [of the People's Republic of China]) (2012) Guowuyuan Bangongting guanyu yinfa 'shi erwu' quanguo chengzhen shenghuo laji wuhaihua chuli sheshi jianshe guihua de tongzhi (The General Office of the State Council [of the People's Republic of China] on publicizing the plan to build facilities nationwide which process and manage waste safely under the 12th Five-Year Plan). 19 April. [http://www.gov.cn/zwgk/2012-05/04/content\\_2129302.htm](http://www.gov.cn/zwgk/2012-05/04/content_2129302.htm), accessed 1 November 2013.
- Haidianqu di liu ci quanguo renkou pucha lingdao xiaozu bangongshi (Haidian district leading team office for the sixth national population census) et al. (2010) Haidianqu 2010 nian di liu ci quanguo renkou pucha zhuyao shuju gongbao (Announcement of the main data from the sixth national population census, Haidian district, 2010). 20 June. [http://www.hdtjj.gov.cn/HDTJJWEB/rkpc6/S\\_38920.html](http://www.hdtjj.gov.cn/HDTJJWEB/rkpc6/S_38920.html), accessed 10 August 2013.
- Han, Heejin, Swedlow, Brendon, and Unger, Danny (2014) Policy advocacy coalitions as causes of policy change in China?: Analyzing evidence from contemporary environmental politics. *Journal of Comparative Policy Analysis: Research and Practice* 16(4): 313–34.
- Hsu, Angel (2011) China's 12th Five-Year Plan lays out ambitious blueprint, but data challenges remain. Yale Center for Environmental Law & Policy, 31 August. <http://environment.yale.edu/envirocenter/post/chinas-12th-five-year-plan-lays-out-ambitious-blueprint-but-data-and-m/>, accessed 30 August 2014.
- Jenkins-Smith et al., Hank C. (2014) Advocacy coalition framework: Foundations, evolution, and ongoing research. In: Sabatier, Paul A. and Weible, Christopher M. (eds) *Theories of the Policy Process*, 3rd edn. Boulder, CO: Westview Press, 183–224.
- Jiangwaijiang, Lijiang huanyuan shequ luntan (Jiangwaijiang: Lijiang garden community forum) (n.d.) <http://www.rg-gd.net/forum.php?mod=forumdisplay&fid=12>, accessed 2 February 2016
- Johnson, Thomas (2013) The politics of waste incineration in Beijing: The limitations of a top-down approach? *Journal of Environmental Policy & Planning* 15(1): 109–28.

- Kitschelt, Herbert P. (1986) Political opportunity structures and political protest: Anti-nuclear movements in four democracies. *British Journal of Political Science* 16(1): 57–85.
- Kriesi, Hanspeter (1995) The political opportunity structure in new social movements: Its impact on their mobilization. In: Jenkins, J. Craig and Klandermans, Bert (eds) *The Politics of Social Protests: Comparative Perspectives on States and Social Movements*. London: UCL Press, 83–98.
- Lai, Weihang (2010) Guangzhou laji fenlei dong zhen'ge: Donghujie shixing shoubian shou-mailao (Guangzhou's waste sorting is becoming serious: Donghu Street tries using rag-and-bone men). 25 January. [http://news.dayoo.com/guangzhou/201001/25/73437\\_11861975.htm](http://news.dayoo.com/guangzhou/201001/25/73437_11861975.htm), accessed 3 December 2013.
- Laji chuli: Zhushaopai yu fanshaopai fenyue de beihou (Managing waste: Background of the gap between the pro-burn and anti-burn coalitions) (2010) 27 April. <http://tech.sina.com.cn/d/2010-04-27/17304117881.shtml>, accessed 2 September 2015.
- Lan, Zhixin (2012) Laji chuli wen minyi Guangzhou jiang she gongzhong zixun jiandu weiyuanhui (Guangzhou will set up a public consultation and supervision committee to collect public opinion on waste management). 20 June. <http://finance.sina.com.cn/roll/20120620/014412356140.shtml>, accessed 31 August 2015.
- Lewis, Tammy (2000) Transnational conservation movement organizations: Shaping the protected area systems of less developed countries. *Mobilization: An International Quarterly* 5(1): 103–21.
- Li, Biao (2013) Zhengce butie zhuli gedi laji fenshao xiangmu dayuejin (Government subsidizes for waste incineration projects in different parts of China). 17 July. <http://news.sina.com.tw/article/20130717/10162640.html>, accessed 2 November 2013.
- Li, Wanxin (2012) Advocating environmental interests in China. *Administration & Society* 44(6S): 26–42.
- Lieberthal, Kenneth (1997) China's governing system and its impact on environmental policy implementation. *China Environment Series* 1, 3–8. <https://www.wilsoncenter.org/sites/default/files/CES%201%20Part%202.pdf>, accessed 11 February 2016.
- Liu, Gang and Zhou, Hualei (2009) Guangzhou: 'Sanbu', yi huanbao zhi ming (Guangzhou: 'Taking a stroll', in the name of environmental protection). *Zhongguo xinwen zhoubao* (China newsweek), no. 44. <http://magazine.sina.com/bg/chinanewsweek/2009044/2009-12-07/ba80275.html>, accessed 1 December 2013.
- Ma, Jinyong (2007) Liulitun fenshaochang yin zhengyi (The Liulitun incinerator leads to controversy). *Jinghua shibao* (Beijing times), 18 April, A03. [http://epaper.jinghua.cn/html/2007-04/18/content\\_107002.htm](http://epaper.jinghua.cn/html/2007-04/18/content_107002.htm), accessed 13 August 2013.
- MacKinnon, Rebecca (2011) Liberation technology: China's 'networked authoritarianism'. *Journal of Democracy* 22(2): 32–46.
- Mertha, Andrew (2009) 'Fragmented authoritarianism 2.0': Political pluralization in the Chinese policy process. *The China Quarterly* 200: 995–1012.
- Mertha, Andrew (2010) Society in the state: China's nondemocratic political pluralization. In: Gries, Peter Hays and Rosen, Stanley (eds) *Chinese Politics: State, Society and the Market*. London and New York: Routledge, 69–84.
- Non-communist parties in China (n.d.) ChinaCulture.org. [http://www1.chinaculture.org/library/2008-02/14/content\\_22254\\_2.htm](http://www1.chinaculture.org/library/2008-02/14/content_22254_2.htm), accessed 11 August 2013.
- O'Brien, Kevin J. and Stern, Rachel E. (2008) Introduction: Studying contention in contemporary China. In: O'Brien, Kevin J. (ed.) *Popular Protest in China*. Cambridge, MA: Harvard University Press, 11–25.
- Panyu laji fenshaochang yi tingjian, huanping xu min'ganqu qunzhong 75% yishang tongyi cai tongguo (Construction of Panyu incinerator has been suspended, at least 75% of mass consent

- from the sensitive area is required for passing environmental impact assessment) (2009) 21 December. <http://www.boxun.com/news/gb/china/2009/12/200912212012.shtml>, accessed 11 December 2013.
- Pei, Minxin (2009) *China's Trapped Transition: The Limits of Developmental Autocracy*. Cambridge, MA: Harvard University Press.
- Revolutionary Committee of the Chinese Kuomintang (2013) 18 October. <http://www.mingge.gov.cn/mgzy/mgjj/201310/f516dcfa9c3a41919bafceff31d732e8.shtml>, accessed 11 August 2013.
- Rootes, Christopher A. (1999) The transformation of environmental activism: Activists, organizations and policy-making. *Innovation: The European Journal of Social Science Research* 12(2): 155–73.
- Sabatier, Paul A. (ed.) (2007) *Theories of the Policy Process*, 2nd edn. Boulder, CO: Westview Press.
- Schlager, Edella (1995) Policy making and collective action: Defining coalitions within the advocacy coalition framework. *Policy Sciences* 28(3): 243–70.
- Shapiro, Judith (2012) *China's Environmental Challenges*. Cambridge and Malden, MA: Polity Press.
- Shenzhen GPD zhanju quanguo diwu, luohou BeiShangGuang he Tianjin (Shenzhen's GDP ranks fifth in China, listed after Beijing, Shanghai, Guangzhou, and Tianjin) (2013) 31 October. [http://gd.ce.cn/sy/gd/201310/31/t20131031\\_1170964.shtml](http://gd.ce.cn/sy/gd/201310/31/t20131031_1170964.shtml), accessed 21 July 2014.
- Sinkule, Barbara J. and Ortolano, Leonard (1995) *Implementing Environmental Policy in China*. Westport, CT and London: Praeger.
- Spires, Anthony J., Tao, Lin, and Chan, Kin-man (2014) Societal support for China's grassroots NGOs: Evidence from Yunnan, Guangdong, and Beijing. *The China Journal*, no. 71: 65–90.
- Sun, Ying (2008) Liulitun laji fenshaochang wancheng huanping shouxu (The environmental impact assessment of the Liulitun incinerator has been completed). 9 October. <http://news.sina.com.cn/c/2008-10-09/133014550306s.shtml>, accessed 13 August 2013.
- Swidler, Ann (1995) Cultural power and social movements. In: Johnston, Hank and Klandermans, Bert (eds) *Social Movements and Culture*. Minneapolis: University of Minnesota Press, 25–40.
- Tan fanglunshi luntan (Discussion forum on the real estate market) (n.d.) <http://house.focus.cn/msglist/>, accessed 11 February 2013.
- Tang, Yingwu and Li, Jiangtao (eds) (2010) *Guangzhou lanpishu: Zhongguo Guangzhou shehui fazhan baogao (2010)* (Blue book of Guangzhou: Annual report on social development of Guangzhou in China (2010)). Guangzhou: Social Sciences Academic Press.
- Tarrow, Sidney (2011) *Power in Movement: Social Movements and Contentious Politics*. New York: Cambridge University Press.
- Teets, Jessica C. (2014) *Civil Society under Authoritarianism: The China Model*. New York: Cambridge University Press.
- Tesh, Sylvia N. (1999) Citizen experts in environmental risk. *Policy Sciences* 32(1): 39–58.
- Tian, Lei (2008) Liulitun laji dianchang 'jiaoting' zhihou (After the building of Liulitun waste-to-energy incinerator was 'halted'). *Zhongguo huanbao lianmeng* (Environmental protection union). 14 March. <http://www.epuncn.com/huanbao/5157.htm>, accessed 12 August 2013.
- Wang, Chin-chih (2013) Beijing fan laji fenshao fadianchang kangzheng zhi anli fenxi (Anti-incinerator activism in Beijing: A case study). [http://140.119.184.164/award\\_pdf/11.pdf](http://140.119.184.164/award_pdf/11.pdf), accessed 13 February 2016.
- Wang, Congcong (2013) Woguo sanfenzhiyi chengshi zao laji weicheng, qizhan tudi 75 wan mu (One-third of the cities in China are overwhelmed by waste, occupying 75 mu of land). *Zhongqing zaixian* (China youth daily online), 19 July. [http://zqb.cyol.com/html/2013-07/19/nw.D110000zgqnb\\_20130719\\_1-08.htm](http://zqb.cyol.com/html/2013-07/19/nw.D110000zgqnb_20130719_1-08.htm), accessed 29 October 2013.

- Wang, Qing (2006) Haidianqu zhengfu huiying weiyuan: Liulitun laji chuli jiang jian fen-shaochang (Haidian district government replies to [CPPCC] members: Plan to build an incinerator in Liulitun for waste management). 15 December. <http://cppcc.people.com.cn/GB/34952/5172640.html>, accessed 11 August 2013.
- Wang, Qing (2007) Jumin chi biaoyu yaoqiu ting jian laji fenshaochang (Residents held banners against the construction of the incinerator). 15 April. <http://news.sina.com.cn/s/2007-04-15/013812779589.shtml>, accessed 13 August 2013.
- Weible, Christopher M., Sabatier, Paul A., and McQueen, Kelly (2009) Themes and variations: Taking stock of the advocacy coalition framework. *Policy Studies Journal* 37(1): 121–40.
- Wu, Fengshi (2013) Environmental activism in provincial China: Comparative evidence from Guangdong and Guangxi. *Journal of Environmental Policy and Planning* 15(1): 89–108.
- Yang, Guobin (2003) The Internet and civil society in China: A preliminary assessment. *Journal of Contemporary China* 12(36): 453–75.
- Yang, Guobin (2008) Contention in cyberspace. In: O'Brien, Kevin J. (ed.) *Popular Protest in China*. Cambridge, MA: Harvard University Press, 126–43.
- Zhang, Yuqin (2010) Guangzhou laji fenlei jiang youfa keyi (Waste sorting in Guangzhou will be regulated by law). 26 January. <http://www.chinanews.com/ny/news/2010/01-26/2091751.shtml>, accessed 3 December 2013.
- Zhonghai fenglian shanzhuang yezhu luntan (Zhonghai fenglian mountain villa owners forum) (n.d.) <http://house.focus.cn/msglist/1396/>, accessed 11 August 2013.
- Zhu, Jiangang (2010) Guangzhou: Zui ju gongmin shehui qixiang de dushi (Guangzhou: A city with the most vibrant civil society). 12 October. <http://maizhi2010.blog.163.com/blog/static/13589228920109126648879/>, accessed 30 August 2014.