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Community-based organisations in city environmental policy regimes: lessons from Philadelphia

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In this paper we examine the role of community-based organisations (CBOs) in the environmental policy regime of Philadelphia, through a citywide survey (N = 40) and interviews with leaders from three types of CBOs: community development corporations (CDCs), civic associations (CAs), and business-improvement organisations. We found that CBOs of all types have changed their organisational missions and identities in response to their pursuit of sustainability goals, but that CDCs more so than either CAs or business organisations have integrated sustainability into their governance structures. Second, we found that a growing number of CBOs have expanded their work to involve environmental policy and programming. Third, we found that the work of local non-profit organisations has become directly linked to the city's broader sustainability plan, *Greenworks*.

Keywords: environmental policy regime; community-based organisations; sustainability planning; Philadelphia

In this paper we examine the role of community-based organisations (CBOs) in the environmental policy regime of Philadelphia, which like other American cities has over the past decade incorporated environment- and sustainability-related provisions into various policy areas, including land-use planning and zoning, building codes, and property and vehicle fleet management (Roseland 1992, Portney 2002, Patton 2009, Saha 2009, Zeemering 2009, Finn and McCormick 2011, Dilworth and Stokes 2012).

As is true with other policy areas, local governments achieve their desired environmental goals as part of a "regime", meaning that they rely for help in policy formulation and implementation on non- or quasi-governmental organisations. As Gibbs and Jonas (2000, p. 300) have noted

Rather than state-imposed regulation and the expectation that local government is the principal delivery organization for the environment, local environmental initiatives these days involve a wide range of local organizations, including local governments, business organizations, environmental groups, community organizations, and other local "stakeholders".

Other authors have noted the importance of local non-profit organisations in green affordable housing (Bradshaw *et al.* 2005); urban agriculture (Travaline and Hunold 2010); improvement of neighbourhood quality (Urban Institute 2005); and crime reduction (Kuo and Sullivan 2001, Donovan and Prestemon 2011, Branas *et al.* 2011). Research has

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also indicated an important link between active citizen groups, community-based nonprofits, and the advancement of municipal policies and planning towards local environmental improvements (Chatterton and Style 2001, Portney and Cuttler 2010).

This current article adds to the literature on environmental policy regimes by focusing not on environmentally focused non-profits, but rather on local, place-based, non-profit development and civic organisations in one large American city. We examined in particular three types of CBOs: (1) community development corporations (CDCs), of which there are approximately 50 in Philadelphia; (2) civic associations (CAs), of which there are approximately 75; and (3) business-improvement organisations, of which there are approximately 40, of two main types: Membership-based business associations (BAs) and businessimprovement districts (BIDs), which are authorised by city ordinances to levy mandatory assessments for service delivery, usually focused on security and street cleaning.

The environmental policy regime in Philadelphia is defined by at least three things: (1) the city sustainability plan, *Greenworks*; (2) other sustainability-related city ordinances and policies; and (3) the missions of the non-profit organisations devoted to sustainability-related issues that operate citywide. In order to understand the role played by CBOs in this policy regime, we sent an on-line survey to 115 organisations in Spring 2010. Forty organisations responded for a 35% response rate. The respondents consisted of 19 CDCs, 15 CAs, and six business organisations. Eighty-three per cent of the responding organisations reported that they served one specific neighbourhood, and the neighbourhoods they reported serving were scattered uniformly throughout the city, representing a relatively broad range of socioeconomic status. We asked CBO officials three types of questions regarding:

- The types of sustainability-related activities in which CBOs engage, with a focus on five core operational areas: green building, management of current rental units, green jobs training, neighbourhood beautification, and environmental planning.
- The extent to which CBOs have changed their missions and governance structures to engage in sustainability-related activities.
- Partnerships that CBOs have formed with both government agencies and other nonprofits in carrying out their sustainability-related activities.

We followed up our survey with in-depth interviews of CBO staff who had indicated an established set of programmes in our survey and were thus seen as recognised leaders in sustainability programming. We also interviewed representatives from relevant citywide organisations, such as the Philadelphia Associations of CDCs (PACDC) (an advocacy group of which nearly every CDC in the city is a member), Local Initiatives Support Council (LISC), Delaware Valley Green Building Council (DVGBC), and the Community Design Collaborative.

There are at least three important findings from our survey and interviews. First, we found that CBOs of all types have changed their organisational missions and identities in response to their pursuit of sustainability goals, but that CDCs, more so than either CAs or business organisations, have integrated sustainability into their governance structures, namely in their consideration of board appointees. Second, we found that CBOs have expanded their work to involve environmentally oriented non-profits as well as larger city agencies and utilities. Third, we found that the work of CBOs is linked to the city's broader sustainability plan, *Greenworks*.

In the next section of this paper, we provide more detail about Philadelphia and the emergence of an environmental policy regime in the city during the first decade of the twenty-first century, as a means of providing both a context for the later discussion of CBOs and also a means for understanding how the case of Philadelphia might be compared with the environmental regimes of other cities. We focus in particular on placing Philadelphia in the context of the 10 largest American cities, the majority of which are, unlike Philadelphia, located in the southwestern USA. The comparison of Philadelphia to these southwestern cities is important because it suggests that not all American cities face the same environmental challenges, and that they may thus form different types of regimes in response to those challenges. In the next two sections of the paper, we present our findings about the sustainability-related activities of CBOs, starting first with CBO governance, mission, and partnerships with other non-profits and government agencies and, second, looking at how the specific sustainability-related activities of CBOs fit within the city's larger environmental policy regime.

Philadelphia and the emergence of a local environmental policy regime

Among the 10 most populous cities in the country (according to the 2010 Census), Philadelphia (the fifth largest, with a population of approximately 1.5 million) is relatively unique for being located, along with Chicago and New York, in the Midatlantic-Midwestern "Rustbelt" region, while the seven other cities (Los Angeles, San Diego, San Jose, Phoenix, Houston, Dallas, and San Antonio) are located in the Western and Southwestern "Sunbelt". The three Rustbelt cities are on average geographically smaller than the Sunbelt cities, with the result that they are denser and characterised less by sprawl-type development, reflected in lower levels of vehicle miles travelled in their respective metropolitan areas. Combined with regional differences in weather and relative water scarcity, the differences in land-use patterns most likely mean that the Rustbelt cities face somewhat different environmental challenges than the Sunbelt cities (Chatterton 2002, Schilling and Logan 2008).

Rustbelt and Sunbelt cities clearly face different environmental challenges. This statement is reflected by the fact that, despite each having adopted rather ambitious sustainability plans and initiatives, Rustbelt cities tend to be ranked higher among the top 10 in the 2006 and 2008 SustainLane city sustainability rankings.¹ If nothing else, SustainLane rankings suggests at least the possibility that environmental policy regimes in the Rustbelt cities are organised differently than those in the Sunbelt.

With regard to the role of CBOs in local environmental policy, Philadelphia may also be relatively unique for being, by at least some measures, the poorest of the country's biggest cities, with the lowest median income and retail sales per capita, and the highest percentage of its population in poverty, though it does have the third highest homeownership rate and the sixth highest median value of owner-occupied homes. A poorer population would seem likely to have a greater presence of at least some types of CBOs, such as CDCs which are largely focused on low-income housing development and social service provision for the poor, though not necessarily a greater presence of CBOs that are part of an environmental policy regime.

Philadelphia's eighth place ranking by SustainLane was widely touted by the city's environmental policy regime (see, for instance, Hughes 2008, Walsh 2009), the emergence of which is reflected among other places in increasing media attention to sustainability issues, the emergence of a city sustainability policy, the creation of new non-profit organisations devoted to sustainability, and new sustainability programmes within existing place-based non-profits.

Increasing attention to sustainability issues in the Philadelphia media was reflected in the establishment of a new publication devoted specifically to sustainability, the monthly *GRID Magazine*, which began circulation near the end of 2008, and of other media venues that provided extensive coverage of sustainability issues, such as Plan Philly, a news website of Penn Praxis, a branch of the University of Pennsylvania School of Design. Existing media outlets also created new venues for reporting on sustainability issues, such as the "Green" portal of Philly.com, the website of Interstate General Media, which owns the city's two major dailies, the *Inquirer* and *Daily News* (Dilworth and Stokes 2012).

Sustainability and environmental policy also became topics of interest and concern throughout the city government. In 2005, members of the city planning commission and other executive branch agencies established a sustainability working group, which by 2006 had over 50 members. John Street, the mayor from 2000 to 2008, appointed a sustainability coordinator in the Managing Director's Office, who in 2007 released a city climate change action plan. Also in 2007, Street issued an executive order that required new city buildings or major renovations to existing buildings to be built to the "silver" standards of the US Green Building Council's (USGBC) Leadership in Environmental and Energy Design (LEED) rating system.

Philadelphia's mayors are limited to two terms, and thus 2007 was the last full year of Street's term. In a new twist on the city's mayoral campaigns, each candidate running in 2007 issued a position paper on environmental policy. The winning candidate and current mayor, Michael Nutter, built upon Street's sustainability coordinator position to establish the Mayor's Office of Sustainability (MOS), which in 2009 released a comprehensive city sustainability plan, *Greenworks*, that consists of nearly 150 specific activities, all categorised into 15 targets to be reached by 2015, and grouped into five major themes: energy, environment, equity, economy, and engagement (Table 1).

The city council also embraced sustainability policies, creating a new standing committee on the environment in 2007. Some of the more important pieces of legislation considered by the committee and passed by council were those to convert into an ordinance Street's

Table 1. Greenworks themes and targets.

Theme 1: Energy

- Target 2: Reduce citywide building energy consumption by 10%
- Target 3: Retrofit 15% of housing stock with insulation, air sealing and cool roofs
- Target 4: Produce and generate 20% of electricity used in philadelphia from alternative energy sources

Theme 2: Environment

- Target 5: Reduce greenhouse gas emissions by 20%
- Target 6: Improve air quality toward attainment of federal standards
- Target 7: Divert 70% of solid waste from landfills

Theme 3: Equity

- Target 8: Manage stormwater to meet federal standards
- Target 9: Provide park and recreation resources within 10 minutes of 75% of residents
- Target 10: Bring local food within 10 minutes of 75% of residents
- Target 11: Increase tree coverage towards 30% in all neighbourhoods in 2025

Theme 4: Economy

- Target 12: Reduce vehicle miles travelled by 10%
- Target 13: Increase the state of good repair in resilient infrastructure
- Target 14: Double the number of low- and high-skill green jobs

Theme 5: Engagement

Target 15: Philadelphia is the greenest city in America

Target 1: Lower city government energy use by 30%

executive order regarding LEED ratings for city buildings and to provide "sustainable business tax credits" to city firms that met the environmental and social responsibility standards of the non-profit B Lab corporation. The council even briefly considered, though did not approve, changing a programme popular among the city's building interests that provides a 10-year property tax abatement on new construction and significant renovations, so that only those buildings that achieved LEED silver standards would qualify for the abatement.

Despite the building industry's resistance to the change in the tax abatement programme, many of the industry's more significant actors pursued sustainability goals. Most prominently, Liberty Property Trust, a \$6.2 billion real estate investment trust that owns property throughout the USA and UK, and whose headquarters are located in the suburbs of Philadelphia, made a conscious statement in 2001 about green building in the city when it chose to build the Comcast Center, which is now the tallest building in downtown Philadelphia, to LEED silver standards. More generally, the primary association representing the city's building interests, the Building Industry Association (BIA), established a Green Committee in 2007, and the BIA's president at the time, Sam Sherman, actively promoted green building techniques and systems to the association's members.

The environmentally oriented activities of the city's building industry are especially significant for the purposes of this article, because CDCs are property owners and developers. Indeed, both Sam Sherman and Rick Sauer, executive director of PACDC, testified to city council against the proposed changes that would incorporate LEED criteria into the property tax abatement programme, despite the fact that both are proponents of green building (Dilworth and Stokes 2012).

Finally, the twenty-first century saw the creation of new non-profit organisations in Philadelphia devoted to environmental and sustainability initiatives, such as the DVGBC (the regional affiliate of the USGBC) and the Sustainable Business Network (SBN), both created in 2001. Several more established non-profits also became more actively involved in specifically local sustainability initiatives, such as the Pennsylvania Environmental Center (founded in 1972); Citizens for Pennsylvania's Future (founded in 1998), whose "Next Great City" initiative became an influential source of environmental policy ideas for Nutter's mayoral campaign; and the Pennsylvania Horticultural Society (PHS, founded in 1827), which has had a "green" programme for more than 30 years, in which it partners with community residents and organisations to create community gardens and beautify empty lots, but which has more recently placed this initiative in the larger context of sustainability.

While there is thus an environmental policy regime in Philadelphia composed at least of actors and agencies in city government, media outlets, real estate and building interests, and non-profit organisations, all of the actors mentioned thus far operate at a citywide level, if not statewide, as is the case with several of the non-profits. The PACDC does partner with some of the city's environmental non-profits, such as the SBN, and the PHS is an associate member of the PACDC. Yet none of this actually explains the role of CBOs themselves in sustainability initiatives.

CBO governance and partnerships with respect to sustainability

Our survey and interviews confirmed that CBOs have altered their governance structures to reflect new foci on sustainability, and that they work with various other organisations in pursuing sustainability-related goals, yet that different types of CBOs have changed their structures differently, and they interact with different sets of government agencies and non-profits.

Nearly three-quarters (72%) of the CBOs indicated that sustainability was either "important" or "very important" to their organisations, though only 52% reported that they had altered their mission statements or prominent descriptions of themselves to reflect sustainability goals. Of those CBOs, CDCs were more likely than CAs or business organisations to also look for expertise in sustainability when selecting new board members. More specifically, 23% of all CBOs, but more than half of the CDCs, reported making sustainability-related expertise a criterion for board member selection.

CAs primarily serve a community democracy function in that they have an open membership for residents and they exercise some oversight (and sometimes veto) power over developments in their neighbourhoods;² business organisations are more focused on the cleanliness and security of commercial corridors; and CDCs focus mostly on housing and commercial development, employment training, social service provision, and public space management (Melendez and Servon 2007). The fact that CDCs are more likely to select board members with expertise in sustainability suggests that typical CDC functions, especially those related to housing and workforce development, are more closely linked to sustainability issues than are the functions or CAs or business organisations.

Given that the different types of CBOs serve different functions, we also expected them to interact more frequently with different sets of government agencies and non-profits. More specifically, we expected that CDCs, as developers, were more likely to engage with planning and green-building-advocacy organisations; while CAs would be more involved with city agencies for community cleaning (such as the city sanitation department) and greening activities (such as the PHS, mentioned in the previous section, or non-profits that plant trees). Our expectations were largely confirmed by the surveys, as discussed in the next section of this paper. We also expected CBO capacity to be related to the extent to which they interacted with other organisations, though in conceivably different ways. For instance, CBOs with smaller budgets and less staff might depend more on partnerships with other organisations, while CBOs with more capacity might work more often with other organisations, precisely because they could provide more to those organisations.

The capacity of the CBOs that responded to our survey varied widely; annual budgets ranged from a high of \$48 million to a low of \$1000, with a mean of \$3.6 million and a median of \$200,000. The mean number of full-time employees was 23, with a median number of 3, revealing a skewed level of resources among surveyed organisations. The level of institutional experience could also serve as a measure of capacity, as the median year that the responding CBOs were founded was 1987, although one-quarter had been in existence for less than a decade.

Asked to identify their core activities, CBOs ranked neighbourhood beautification, community events, community planning, economic development and housing as their top five (see Table 2).

Overall, the level of interaction with other agencies and organisations had a slight variation based on organisational type: with CDCs interacting with an average of 13 other organisations. Civics averaged 11.5 regular contacts with sustainability-related organisations; and BIA's indicated an average of 10.5 organisations. Among government agencies, CBOs reported working on sustainability projects and activities most often with the Pennsylvania Department of Economic and Community Development (64% reported routine interactions related to sustainability with this state agency) and, among city agencies, the Philadelphia City Planning Commission (with 79% of CBOs reporting routine interaction), Streets Department (76% reported routine interaction), Department of Licenses and Inspections (73% reported routine interactions), the Philadelphia Redevelopment Authority

Neighbourhood beautification	77%
Community events	74%
Community planning	67%
Economic development	59%
Housing services	51%
Policy advocacy	33%
Environmental planning	26%
Health-related services	21%
Arts programmes	18%
Other	26%

Table 2. Percent of CBO's active in key policy areas.

(59%), and the Philadelphia Water Department (58%). Only 39% of the CBOs reported routine interaction with the MOS.

Less interaction with the MOS as compared with other city agencies does not necessarily indicate less involvement with the city's sustainability plan, which includes programmes within all of the departments with which the CBOs have more routine interaction. In addition, part of the less frequent interaction between the MOS and CBOs might simply be a result of the fact that the MOS is a smaller and younger agency, which thus has fewer personnel with which CBOs might interact with and CBOs have had less time to interact with those personnel (Table 3).

Among non-governmental organisations, PHS, discussed in the previous section, is clearly the most interactive partner, with 71% of CBOs reporting routine interaction. Interviews indicate that many of the CBOs work closely with the PHS to coordinate greening of vacant lots through the Society's Philadelphia Green programme as well as seasonal tree planting. Fifty-six per cent of CBOs reported routine interactions with the Community Design Collaborative, which is a pro-bono architecture and design non-profit, and 64% with the Mural Arts Program, a finding which is indicative of the high number of organisations that focus on neighbourhood beautification programming.

Follow-up interviews revealed emerging partnerships among CBOs themselves, especially in neighbourhoods where there are multiple CBOs, of different types. For instance, in South Philadelphia, the Passyunk Square Civic Association shares resources and collaborates with the East Passyunk Business Improvement District as well as a local CDC. The same holds for both West and North Philadelphia, where LISC, a national community development technical assistance organisation, has created two Sustainable Communities Initiatives (SCI-West and SCI-North). SCI-West is a partnership among three CDCs (The Enterprise Center, The People's Emergency Center, and The Partnership CDC) and one special services district, (The University City District); and SCI-North is a partnership between LISC and the Asociación Puertorriqueños en Marcha (APM) a CDC that operates in North Philadelphia. Each of these partnerships is "designed to better coordinate development efforts in this challenged community, and implement a long-lasting, sustainable, comprehensive neighborhood development strategy" (LISC 2012).

Sustainability-related activities of CBOs and their contribution to city sustainability goals

Our survey clearly indicated that, not surprisingly, the sustainability-related activities of different types of CBOs contribute to different goals within *Greenworks*. While CDCs

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Table 3. Level of interaction between CBOs and other organisations.

Organisation	At least monthly	Less than monthly (%)	Never (%)
State			
Dept. of Conservation and Natural Resources	3	22	75
Dept. of Economic and Community	6	58	36
Development			
Dept. of Environmental Protection	0	22	78
Dept. of Transportation	6	24	70
City			
License and Inspection	24	49	27
Mural Arts Program	12	52	36
Office of Sustainability	10	29	61
Parks and Recreation	29	32	39
City Planning Commission	27	53	20
Streets	30	46	24
Transportation	9	22	69
Philadelphia Industrial Development Corporation	9	34	57
Philadelphia Redevelopment Authority	22	38	40
Water Department	12	46	42
Regional			
Delaware Valley Regional Planning Commission	19	31	50
SEPTA (Public Transit Authority)	13	22	65
Non-governmental Academia	19	31	50
American Institute of Architects	0	31	50 69
American Planning Association	0	13	87
Bicycle Coalition of Greater Philadelphia	6	28	66
Community Design Collaborative	24	32	44
DVGBC	3	25	72
Neighborhoods Garden Association	9	23	70
PennFuture	16	19	65
Pennsylvania Environmental Council	9	19	72
PHS	38	32	39
Philadelphia Association of CDCs	29	21	59 50
Philadelphia Neighborhood Alliance	3	31	50 66
SBN of Greater Philadelphia	12	13	75
SBN 01 Greater Philadelphia	12	13	/5

were more likely than other types of CBOs to engage in sustainability-related activities, and while those activities were in some respects more clearly connected to the goals of *Greenworks*, the sustainability-related activities in which CAs engaged contributed to a broader range of *Greenworks* goals.

As indicated in Table 1, *Greenworks* is divided into five major categories (energy, environment, equity, economy, and engagement), in which there are 15 major targets, broken down further into nearly 150 different activities. Not all of the categories are created equally. For instance, the energy and equity categories each include four targets, the environment and economy categories each include three targets, and the engagement category includes only one relatively vague target, to make Philadelphia the "greenest

city in America", under which there are five more specific though still vague activities, such as "reach out to stakeholders" and "develop social marketing and public education campaigns" (p. 87). To a great extent, the previously discussed interactions and partnerships between city agencies and CBOs satisfy the "reaching out to stakeholder" activities of the "engagement" category. By comparison, however, the "energy" category includes such specific activities as "reduce city fleet by 500 additional cars" and "fast track LEED-certified and energy efficient buildings" (p. 83).

Given the range and breadth of activities included in Greenworks, every sustainabilityrelated activity by any CBO could be understood to contribute to the city's sustainability plan. We have thus narrowed our focus here, to look primarily at the development and property management activities of CDCs, as an illustration of how CBO activities have contributed to some of the more specific and concrete activities included in *Greenworks*.

Most of the activities related to green building in *Greenworks* are included in the "energy" category, to which CDCs, being the CBO most involved in building and property management activities, contributed the most. While 49% of all responding CBOs reported no green building activity, 14 out of 19 CDCs in the survey had pursued at least three specific types of green building activities, all of which are included in the *Greenworks* "energy" category, with the most popular among CDCs being the installation of energy-efficient lighting, Energy Star appliances, and energy-efficient windows; adaptive reuse of existing building stock; weatherisation; and stormwater capture. Of these activities, the only one not included in the *Greenworks* energy category was stormwater capture, which is included under the "equity" category. At least three of the city's more prominent CDCs – The Enterprise Center, People's Emergency Center, and APM – have all developed properties that meet LEED standards, which is also a target within the *Greenworks* energy category.

One example of a CDC-based project that highlights their growing set of environmental activities is the New Kensington CDC's (NKCDC) Sustainable 19125 Big Green Block initiative – named after the zip code in which the NKCDC operates, a traditionally working class, white, and Latino, neighbourhood, that is experiencing gentrification. NKCDC initiated Sustainable 19125 in 2009 to provide public education and outreach through the use of volunteer "green guides" and to install green infrastructure (new stormwater basins, tree plantings, and a planned rain garden) on an entire city block (personal interview, Shanta Schachter, May 2011). In Kensington and in much of the city, past development patterns made limited use of green infrastructure, instead relying on storm drainage systems that are combined with sewage systems. Finding ways to reduce stormwater run-off in the many built-out areas of the city through rain capture systems has become part of a larger planning effort that relies on local implementation strategies (Table 4).

With regard to rental property management, 9 out of the 19 responding CDCs indicated having rental units in which they engaged in an average of five sustainability-related activities, all of which are included as activities under the *Greenworks* energy category, the most popular being the installation of Energy Star appliances, high-efficiency heating and cooling systems, Energy Star windows, and the least popular being low-flow water fixtures, high-efficiency lighting, weatherisation, and white or silver roofing. These nine CDCs also provided some training in sustainable practices to their tenants, including (from most to least often provided) training in recycling, energy conservation, water conservation, green cleaning products, and green purchasing policies – activities that are included in the equity, environment, and energy categories of *Greenworks*.

In the cases of both property development and management, the major impediment to sustainability activities was cost. Higher up-front development costs have rendered many

	Percent
Energy-efficient lighting	38
Adaptive reuse of buildings	33
Energy star appliances	33
Weatherisation	33
Energy star windows	31
Storm water capture	31
Brownfields	23
Low VOC paints	23
Construction waste management	23
Low water fixtures	21
Day lighting	18
Heat island mitigation	18
Sustainably harvested wood	15
LEED	15
Pollution prevention	13
Regionally sources building materials	13
Green roof	10
Green certified materials	10
Light pollution	10
Reduced site disturbance	5
Gray water recycling	5
On-site alternative energy	5
Green power purchase	3

Table 4. Percent of CBO's pursuing key sustainably activities.

CDCs reluctant to get behind green building. Indeed, the added cost of green building is a significant issue for CDCs, and one to which the PACDC has paid attention – lobbying against city sustainability policies, such as the previously discussed proposed changes to the property tax abatement, if they are perceived to potentially raise building costs (Personal interview, Rick Sauer, 2010). Similarly, CDCs in the survey indicated that the main impediment to sustainability practices in rental property management is the expense of energy-efficient systems. At the same time, however, interviews with CDC staff indicated that, as the owners of the rental units, they had more of a stake in using energy-efficient systems, especially because they often pay tenants' utility bills.

Only one responding CDC, The Partnership CDC, located in West Philadelphia, has offered employment training for "green jobs", a programme for unemployed neighbourhood residents, including some former convicts, to learn how to install green and cool roofs (Clark 2009), despite the fact that about a quarter of CBOs surveyed (24%) engage in some level of general employment training, of which more than half (55%) reported that they believed that the development of the green economic sector is of vital importance to the populations they serve. Thus only one CDC engaged in an activity that contributed to an activity included within the "economy" category of *Greenworks*. Given that the green jobs training programme is also a weatherisation programme, it also fills an activity within the Greenworks energy category.

In contrast to green building and property management activities, both of which are predominantly the purview of CDCs, a much broader range of CBOs – 82% of those responding to our survey, including 100% of the responding CAs and business organisations – reported having or being involved in a community beautification and greening programme, though some of these were only marginally related to something that might

meaningfully be called "sustainability". The most common beautification and greening activity was community clean-up, followed by sidewalk cleaning, tree planting, streetscaping, signage, horticultural training, and vacant lot greening. Of these activities, both tree planting and vacant lot greening are activities included in the Greenworks equity category.

As with other sustainability practices, expense was one of the main impediments to pursuing more expansive community greening and beautification programming. In depth interviews showed that these programmes, specifically lot cleaning and tree planting, are often joint efforts between the CBO and a city agency or programme, such as the Neighborhood Transformation Initiative (McGovern 2006), Office of Housing and Community Development, or Philadelphia Water Department; non-profit organisations such as the PHS, Tree Vitalize, and neighbouring CAs; volunteer groups such as University City Green or friends of parks; and educational institutions, including universities and public schools.

Finally, 10 responding CBOs reported sustainability planning and education efforts. One third of CDCs indicated at least one planning and education programme or activity, while 28% of Civics and 25% of responding BIAs offered planning and education programming. While only a limited number of CBOs offered planning and education programmes, the variety of activities performed suggests a relatively deep involvement. The most popular activities were park and playground planning, recycling, and land acquisition planning for community gardening programmes. Less frequent planning activities included environmental awareness promotion, open space planning, storm water management, and transit-oriented development planning.

As noted above, our surveys were augmented by in-depth interviews with leading organisations. For one CA, Passyunk Square, located in a gentrifying area of South Philadelphia, their sustainability activities were limited to recycling trash, Christmas trees, and batteries. Yet CAs also took advantage of sustainability-related programmes offered by other organisations, such as the Philadelphia Water Department's rain barrel workshops and stormwater management improvement programme. CDCs, on the other hand, have the capacity to tackle larger planning programmes. For example, APM annually updates a 10-year "quality of life plan", which guides its investments in affordable housing, affordable rental housing and economic development, and which also calls for making the neighbourhood a green model for the city (Personal Interview, Rose Gray, May 2011). One larger business organisation in the city, the University City District, has adopted a scaled-down version of the city's Greenworks plan for the neighbourhoods it serves in West Philadelphia, essentially taking the larger environmental goals of the city and measuring their service area's contribution to the success metrics laid out in the larger plan (Personal interview, Seth Budig, 2011). Another business organisation in the northwestern section of the city, the Manayunk Special Services District, promotes green local business in the region by hosting a two day street fair day, the Eco Arts Festival (Personal Interview, Jane Lipton, October 2011).

Conclusions

In this work, we sought to catalogue the type and scope of environmental policy activities pursued by CBOs in Philadelphia. In the most general sense, we found a strong commitment to the concept of sustainability across a wide spectrum of CBOs. Despite the enthusiasm evinced by these organisations, clear trends emerged around the type of organisations that were best able to commit to substantial programmatic efforts. In general, the better funded CDCs, and to a lesser extent, BAs were better able to expand or adapt their current set of programmes to fit into funding and policy incentives around sustainability. Moreover, the three different types of CBO included in the study varied widely on the type and scope of environmental programming pursued.

Many of Philadelphia's CDCs have expanded their service portfolio beyond lowincome housing to include commercial development, social services, public space management, and larger community planning efforts. Thus, due to their orientation as developers of real property and community amenities, many of these organisations revealed the most substantial impacts in environmental activities, including green building construction; rental housing unit energy efficiency (both in terms of physical retrofit and tenant behavioral education programming); green employment development; green space planning and sustainable transportation planning. The CDCs interviewed for this study were extremely involved in sustainability-related programming. In many ways, sustainability has become a core value of these organisations.

Due to the nature of CAs as volunteer organisations, their environmental activities had more to do with political advocacy (park development, transportation and land-use planning issues), community education (recycling programmes); green space development and maintenance (urban agriculture, block and lot clean-ups, tree planting) as well as generally promoting sustainable programmes and outcomes to the communities they served. Though more limited in their scope, CAs form a strong link between the city's neighbourhoods and its policy-makers. Thus, their move towards a sustainability orientation should have an impact on the desire for municipal leaders to follow through on existing commitments to sustainability, as well as impact future political and policy discussions around the topic.

Business organisations had a few definable sets of environmental activities: including energy efficiency programmes (energy audits, promotion of existing tax incentive programmes around energy use); community greening (tree planting); and the promotion of sustainable food systems (hosting framers markets).

The growth of national advocacy organisations (e.g. Business Alliance for Local Livable Sustainable Economies and the Sustainable Business Alliance) that promote environmentally sustainable business practices have taken hold in many cities, including Philadelphia. These organisations stress the negative environmental impact of commercial globalisation and seek to re-localise commerce as a key policy outcome (Hess 2009). As Philadelphia's many local commercial districts come to embrace sustainability as a core value, there will be a continuation of recent policy efforts to strengthen local economies through the promotion of locally owned and sourced businesses.

While this study revealed the relative strengths of the three main types of CBOs in the city to produce sustainable outcomes, another aspect of the study sought to assess the nature of an emerging public policy network around community-based sustainability planning and programming. As noted above, Philadelphia has recently made substantial strides in reducing its negative environmental impact. This is especially the case of the current Mayor as well as a growing cadre of city council members who have made sustainability the centre piece of a larger economic, social and public health political platform (Dilworth and Stokes 2012). Modern cities, however, are governed by a wide array of network actors, including other levels of government (including quasi-public actors such as public authorities and utilities), private commercial interests, national and local policy interest and advocacy groups, and, in the case presented here, CBOs. In Philadelphia, the increasing level of interaction between community-based non-profit organisations and environmental policy advocacy organisations has been impressive, and predicts that broader community development goals will continue to embrace environmental improvement as a core value of urban living.

Notes

- The SustainLane rankings reflect the most widely known and sophisticated ranking of 16 different sustainability activities and outcomes of the 50 most populous American cities. As Saha (2009, p. 43) notes of value of the SustainLane dataset, "Instead of focusing only on local adoption initiatives, these data take into consideration cities' actual performance on a range of sustainability initiatives and allow for a comparative evaluation of city sustainability efforts". The top 10 cities for in the 2008 rankings were: Portland, San Francisco, Seattle, Chicago, New York, Boston, Minneapolis, Philadelphia, Oakland, Baltimore (Karlenzig *et al.* 2007, pp. 1–18, Saha 2009)
- 2. The city recently underwent a major revision to its zoning code. The code specifies that "registered community organisations" (RCOs) must be notified of proposed projects. The proposed code defines an RCO as an organisation "whose geographic area of concern is a neighborhood. Its registered geographic boundaries shall meet the geographic area set forth in the group's articles of incorporation, bylaws, or other governing documents" (Sec. 12a.2.a).

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Personal interviews

Rick Sauer, Philadelphia Association of CDCs, November 2010.

- Beth Miller, Community Design Collaborative, October 2010.
- Seth Budig, University City District, May 2011.
- Shanta Schachter New Kensington Development Corporation, May 2011.
- Jane Lipton, Manyunk Development Corporation, October 2011.
- Rose Gray, APM-CDC, May 2011.

Appendix. Survey items

- (1) What is the name of your organisation?
- (2) In what year was your organisation founded?
- (3) Does your organisation focus its efforts in a specific neighbourhood or section of the city? If so, please indicate your organisation's service area (s).
- (4) What was your organisation's budget for the last fiscal year?
- (5) Does your organisation have an affiliation with a national or local intermediary?
- (6) How important is environmental sustainability in specifying your organisation's projects, initiatives and priorities?
- (7) Has your organisation incorporated issues of sustainability into its mission statement or operational manuals?
- (8) Has your organisation sought board representation from sustainability, environmental or community health experts or advocates?
- (9) Has your leadership or staff attended training on sustainability-related issues over the past few years
- (10) Does your organisation engage in construction projects (residential, commercial residential)?
- (11) In your pursuit of construction projects (whether homes, commercial or institutional establishments), rate the current importance of each of the following sustainability practices.
- (12) Over the past few years, have your construction projects included any of the following elements of green building?
- (13) Please select all of the activities your organisation requires, or encourages of its rental tenants. Energy Conservation, Water Conservation, Recycling, Other (please specify)
- (14) If your organisation manages rental properties but does not engage in any of the activities listed above, please identify the factors responsible for this outcome.
- (15) Is your organisation involved in green employment training or development?
- (16) Please indicate the degree to which you agree with the following statement. Developing the green employment sector is very important for the future of the community we serve.
- (17) Has your organisation engaged community members around environmental issues (i.e. public meetings, organisation efforts?
- (18) Has your organisation interacted with city or regional planning organisations (i.e. the Philadelphia City Planning Commission, Delaware Valley Regional Planning Commission, etc.) regarding land-use planning?
- (19) Has your organisation gotten involved in transportation planning issues (for example, transit-oriented development)?
- (20) Has your organisation engaged in lobbying activities regarding environmental issues?
- (21) Has your organisation had any contact with Philadelphia's Office of Sustainability
- (22) Has your organisation sought funding for sustainability-related activities such as energy savings, conservation, etc.
- (23) Has your organisation requested technical assistance for environmental planning, programmes or services?