



Exploring how libraries and community-based organizations can work together to mitigate environmental and health-related concerns due to climate change

Public Libraries are Critical Agencies in Multi-Sector Climate Action Plans, Policies, and Actions

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Abstract

Public libraries exist across every state and territory in the United States and are charged with serving the public good, including community lifelong learning needs, inclusive of STEM education. In this context, the profession of librarianship has developed new thinking to articulate how public libraries can embrace the core value of sustainability, including a National Climate Action Strategy for Libraries. This strategy calls on public libraries to harness the transformative power of education for climate justice by developing relationships with local community organizations. This report introduces the framework that has been developed around this topic, some of the work individual public libraries are fully included in strategies focused on critical climate actions. The report argues that libraries are the special ingredient, found in every community across the country, that climate action plans need to actualize the buy-in, collaboration, and energy that will bring them to life.

This report was commissioned as part of the Building Resilient Communities Project and its 2024 Climate Action Symposium: <u>Building Resilient Communities – STAR Library Network (starnetlibraries.org)</u>. Published by <u>STAR Library Network</u>, August 16. 2024.

Introduction

Public libraries are uniquely positioned as catalysts for climate action. They are **ubiquitous**, with more than 17,000 locations in the United States. Approximately 97% of the total U.S. population lives in a public library service area, and on average, Americans live about 2 miles from a local library (IMLS, 2021a, p. 1; Donnelly, 2015). They are **trusted**, with 87% of Millennials and 74% of Baby Boomers agreeing that their library helps them find information that is trustworthy and reliable (Geiger, 2017). Some 40% of Americans say they trust libraries and librarians a lot—more than twice the rate registered for local and national media and the highest figure across eight information sources (Horrigan, 2018). Libraries are **strongly valued**, both for providing access to materials and resources and for promoting literacy and improving the overall quality of life; 94% of Americans say that having a public library improves the quality of life in a community (Pew Research Center, 2013). They **cultivate social capital** in their communities, serving as community anchors that contribute to social cohesion and civic participation both through on site services and programs and through digital equity, inclusion, and justice (Johnson, 2010; Cyr, 2019; ALA, 2023; Ladan, Rajenddran & Manickaraj, 2019).

Public Libraries and the Public Good

"Public good is working to improve society and protect the rights to education, literacy, and intellectual freedom. Libraries are an essential public good and are fundamental institutions in democratic societies. Library workers provide the highest service levels to create informed, connected, educated, and empowered communities."

~ Core Values of Librarianship, American Library Association (2024)

In modern life it is rare to have access to spaces that do not require the purchase of an admission ticket or a product to remain in that space. Public libraries create welcoming, inclusive spaces and services that are open to all while carrying out an educational mission designed for the public good, not a corporate bottom line (ALA, 2024).

Libraries provide materials, information, and programs that present many points of view on current and historical issues. They defend against censorship to ensure all members of a community can access the information and literature that helps them better understand the world around them. Most libraries across the country have adopted the "Library Bill of Rights," which institutionalizes the rights of Americans to use a library regardless of their "origin, age, background, or views," while also respecting their privacy (ALA, 2019a).

This focus on the defense of intellectual freedom is key to effective climate action. For example, issues surrounding climate justice require a keen understanding of history, economics, and public policy from all perspectives—not just from the viewpoints of those in powerful positions in government or business.

The openness and inclusivity of public libraries in general, and their facilities in particular, have resulted in communities increasingly finding value in them as a place of convening; a physical space that can connect the whole community (Rainwater, 2023).

Professional Prioritization of Sustainability Among Librarians

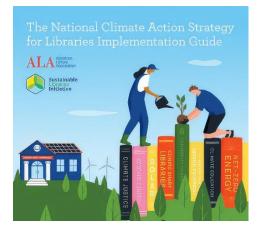
Public libraries are playing a unique role in promoting community awareness of climate change, resilience, and the possibility of a sustainable future. In 2019, the American Library Association (ALA)–the oldest and largest membership association in the library profession with more than 50,000 individual and 4,000 organizational members (ALA, n.d.)–adopted "sustainability" as a core professional value (ALA, 2024).

ALA has also recognized the findings in the latest report of the United Nations' Intergovernmental Panel on Climate Change (IPCC) (Allen et al, 2018). The report, written and edited by 91 scientists from 40 countries who analyzed more than 6,000 scientific studies in October 2018, found that the immediate consequences of climate change are far more dire than previously predicted, calling for a transformation of the world economy at a speed and scale that has "no documented historic precedent." In response, ALA is advocating harnessing the strength of its library network to collaborate with other agencies and institutions to address climate change and its immediate impacts on people and the environment, including the health and wellbeing of all Americans.

ALA has built on the work of its membership and partnered with the *Sustainable Libraries Initiative* (SLI), a not-for-profit project created to build leadership in the library profession to ensure libraries and communities thrive in the coming years in the face of climate change and other major disruptions predicted throughout the country. Over the past decade, thanks to the work of ALA, the SLI, and their partners, a growing number of libraries have deliberately prioritized climate action in their strategic plans, facility plans, and community partnerships. The SLI also has a Sustainable Library Certification Program (SLCP) in which over 150 libraries mostly public libraries—are participating. The SLCP helps libraries manage the organizational and

cultural changes necessary to prioritize "sustainable thinking": using the triple bottom line definition of sustainability to balance environmental stewardship, social equity, and economic feasibility throughout all decision-making in the library across twelve categories (SLI, 2024).

The ALA-SLI partnership has resulted in the development of the *National Climate Action Strategy for Libraries*, released in June 2024 (ALA & SLI, 2024). The strategy exists to focus the attention, energy, and resources of libraries in three key areas:



- Libraries are encouraged to align greenhouse gas emission reduction goals with IPCC standards that are necessary to prevent catastrophic cascading effects.
- Libraries are encouraged to adopt both internal disaster preparedness plans and strategic goals that speak to the most likely climate hazards facing their region to contribute to their community's resilience efforts.
- Libraries are encouraged to harness the transformative power of education for climate justice and develop relationships with local community organizations working on climate justice to embed a deeper awareness of the intersection of human and civil rights with climate stewardship.

This strategy will result in even more libraries being ready and willing participants and partners in climate action efforts for collective impact.

Public Libraries and the Transformative Power of Education

The National Climate Action Strategy for Libraries calls on libraries to work with partners to harness the transformative power of education for climate justice. The educational role of public libraries sees local libraries leveraging physical and outdoor spaces, technology, trained information professionals, active learning programs, a variety of collections, and creative partnerships to meet the needs of their community. While traditional services such as book lending (physical and digital), homework help, and research are still prevalent, the modern public library has expanded the definition of collections and programming to more adequately meet different learning styles and communities' priorities (ibid., 2024).

It is not uncommon to see libraries lending objects far beyond books: gardening tools, kitchenware, craft instruments, sports equipment, home improvement items, and items to increase health and wellness (Curtis Memorial Library, n.d.). The design of programming for community members of all ages has exploded, between 2010 and 2016 there was a 72% increase in the amount of public programming happening in public libraries and this number is growing, evolving beyond the traditional story hour for children and book club for adults (ALA, 2019b). The range of topics in library programming is very broad, but all speak to the aspirations and learning goals of their community.

In the context of STEM learning programming, a significant investment has been made in the evolution of libraries as venues for informal science, technology, engineering, and math (STEM) education (Dusenbery, 2014). The National Science Foundation and NASA have funded several programs and studies (e.g., the Space Science Institute's STAR Library Education Network–STAR Net) demonstrating the effectiveness of public libraries in STEM education (see Reimagining Equity and Values in Informal STEM Education, n.d.). Libraries may provide STEM programs on their own, or in partnership with other libraries, museums, businesses, and schools to educate and engage the public in STEM topics (Dusenbery et al., 2020).

The educational programming work undertaken in public libraries typically requires community partners. Across the United States, public libraries are working with everyone from university researchers to community-based organizations to develop new approaches for learning, growth, and action—the ideal combination to help climate action plans come to life through partnerships large and small.

Leveraging Physical Infrastructure

Public library facilities serve as demonstration sites for climate change mitigation technology and applications such as renewable energy, energy conservation, water management, stormwater mitigation, and waste management.

 The Hendrick Hudson Free Library (NY), the first library in the country to complete the SLCP, boasts a solar array and battery storage, rain garden, composting, and more. They use a flat panel monitor in the children's area to educate the community about solar energy–how it works, how much the library is saving, and the environmental impact of switching to renewable energy.¹



Credit: Hendrick Hudson Free

- The Chrisney Branch of the Lincoln Heritage Public Library (IN) was the first net-zero energy library in the nation, serving as a tactile demonstration of how high-performance green building design and renewable energy could be realized on a tight budget.
- The Concord Free Public Library (MA), the first library in Massachusetts to complete the SLCP, partnered with their municipality to adopt a Sustainability Plan, creating greenhouse gas emission reduction goals, prioritizing indoor air quality, and ecological restoration on their property.
- The San Diego County Public Library, the first in California to complete the SLCP, adopted a master facility plan with the goal of new construction projects exclusively being designed to net zero energy and water design standards.

There is also a growing trend of library facilities providing resources during and after natural disasters, including those supercharged by climate change. Public library facilities, always a refuge for intellectual pursuits, now serve as refuge for an expanding list of basic human needs: air quality, cooling, warming, and food security. Libraries also play a role in acute disaster

¹ These examples and others in the text were collected through the author's extensive engagement with public libraries across America as part of building the Sustainable Libraries Initiative.

recovery efforts, serving as rallying points for volunteers, information distribution centers, and hosts to disaster recovery agencies such as the Federal Emergency Management Agency (FEMA). So much so that FEMA formally designated libraries as essential community organizations through the Stafford Act of 2011 (Patin, 2020).

For example, the Lindenhurst Memorial Library (NY)–one of the first libraries to complete the SLCP–served as a FEMA Disaster Recovery Center in the aftermath of Superstorm Sandy for close to a year. Stationed at the library during this time were not only FEMA but the New York State Department of Health, New York State Department of Children and Family Services, New York State Homes and Community Renewal Department, New York State Office of Mental Health, New York State Department of Financial Services, the local Department of Public Works, the Red Cross, and other federal, state, and local agencies. In one day alone, the American Red Cross food truck served hot meals for 500 residents in the library's parking lot (Capella Loehr, 2012).

Thanks to the role the Lindenhurst Memorial Library played in Superstorm Sandy and their early adoption of the SLCP they have been recognized by municipal leaders as a strong partner. In 2022, the county executive announced a multi-million dollar investment in electric vehicle charging stations to be co-located at libraries to charge residents' and county fleet vehicles. During the press conference to announce the investment, it was noted he chose this library as the location for the announcement due to their leadership on climate action (Suffolk County Government, 2022).

Outdoor spaces at libraries are increasingly leveraged to meet community goals for food security, with libraries providing community gardens to grow fruits and vegetables. From "library farms," (Northern Onodaga Public Library, n.d.), to edible landscaping (Emmaus Public Library, n.d.), to community composting (Greenwich Public Library, n.d.), public libraries are expanding people's minds about how they can contribute to community goals. In Oslo, Norway, public and private funding was used to leverage a partnership with the library to explore ways of integrating urban agriculture in public spaces. Through a study of this project, it was found that this partnership created the opportunity for the dissemination of knowledge on food systems and ecology. Key to the success of this project was the collaboration across sectors and the public-private partnerships created in the process, showing, once again, that libraries make great partners (Evensen & Stafseng, 2024).

The egalitarian nature of library facilities—in that they are open to all in a community—results in residents of all walks of life experiencing a public facility designed with their health and the health of their environment at its core. Quietly leading by example, a growing number of libraries in the United States are engaged in a methodic overhauling of their facilities to address concerns surrounding climate change mitigation and adaptation.

Leveraging Collections, Programs, and Services

Libraries have a proven track record of contributing to the social well-being of communities. Research indicates that public libraries are deeply embedded in their communities in ways that enrich the well-being of residents (IMLS, 2021b). Libraries have been shown to meet a diverse range of needs for individuals, organizations, and their broader community–tackling such issues as community health, school effectiveness, institutional connections, and cultural opportunities.

In addition to the traditional roles of public libraries–curation of knowledge, collective history, and cultural heritage; the provision of access to public knowledge and learning; and the creation of spaces for children to learn and play–libraries are facilitating access to resources and services to get things done. Examples include:

- Hosting Repair Cafes and Fix-it Clinics to connect residents with local experts who will teach them how to fix their "stuff."
- Hosting bicycle repair programs and installing bike repair stations on library property.
- Investing in makerspaces and providing access to expensive or unique equipment (e.g., 3D printers and scanners, laser engraving and cutting machines, computer numerical control (CNC) machines, soldering irons, sewing machines) that enable residents to imagine, create, and innovate.
- Expansion of *The Library of Things* concept to include access to hand tools, kitchenware, repair tools, science equipment (e.g. air quality monitors, multimeter, electricity usage monitor, participatory science kits, etc.).

This "library as laboratory" concept encourages and empowers residents to not only understand



Danbury Public Library Tower Garden. Credit DPL

the world around them, but to engage in actively improving it and innovating for our future. The programs offered alongside physical resources encourage collaborative problem-solving, on a small scale. On a larger scale, they can become a model for how communities can work together to solve the problems they are facing due to climate change.

Conclusion

Social cohesion is the ability for community members to cooperate to achieve a shared wellbeing. Strong social cohesion is one of the most important factors in successfully responding to climate change impacts (Malerba, 2022). Climate action plans will not succeed without the social cohesion, social capital, and social infrastructure that public libraries can provide. The human effort required to make the necessary changes at the speed and scale called for by climate scientists and policymakers is enormous. Without neighbors who have empathy, respect, and understanding for one another, climate action plans will fall flat. Libraries are the special ingredient, found in every community across the land, that climate action plans need to actualize the buy-in, collaboration, and energy that will bring them to life.

Acknowledgement



This work is supported by the National Science Foundation under grant number 2314180 to the Space Science Institute. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

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