COMMUNITY CHANGE GRANTS
Environmental and Climate Justice
U.S. Environmental Protection Agency

EnDyna

Climate Action Strategy 6: Brownfields Redevelopment for Emissions Reduction and Climate Resilience

Brownfields Redevelopment 101

Many formerly polluted sites, called brownfields, have been cleaned up but remain unused. Communities can redevelop these sites to reduce greenhouse gas (GHG) emissions, promote resilience to climate change impacts, or both. Transforming brownfields into green spaces, community resilience hubs, energy-efficient affordable housing, or hubs for generating clean energy can help neighborhoods establish a sense of identity and become more climate resilient. Brownfield sites are eligible for this Strategy ***only if*** applicants demonstrate that cleanup is complete or that cleanup is not necessary for the proposed use. See Section I.G. and Appendix C of the Notice of Funding Opportunity (NOFO) for details. Here are some useful terms to know:

Brownfield sites: According to EPA, they are properties where redevelopment is held back by the presence or potential presence of pollution.

Climate resilience: The ability to prepare for and respond to climate change-related disruptions.

Deconstruction and green demolition: Reusing and recycling building materials instead of sending the materials to landfills.

Cleaned-up brownfield areas before and after redevelopment

Brownfields Redevelopment for Emissions Reduction and Climate Resilience

Brownfields Redevelopment Solutions for Community Challenges

Multiple Brownfield Sites That Impede Economic Development

Community Challenges	Possible Solutions

Many disadvantaged communities contain brownfield sites that sit unused or underused.
• Brownfield sites can lower nearby property values and can suppress the local property tax base.
• Empty lots can also attract garbage dumping or other unwanted uses, and residents may perceive these areas as unsafe or undesirable.
	• Redevelop brownfield sites to support GHG emission reduction and climate resilience. This can turn a negative for the community into a positive. Example redevelopment projects include:
	  • Solar panel installations.
	  • Energy-efficient and climate-resilient affordable housing.
	  • Zero-emission vehicle transport hub (community car/bike share, vanpooling, or ride-sharing).

Lack of Access to Parks and Green Spaces

Community Challenges	Possible Solutions
Brownfield sites may also be found in communities with limited parks and other green spaces • Communities without many trees tend to have higher temperatures than those with more trees. The extra heat and lack of shade can make outdoor and indoor temperatures especially uncomfortable or unsafe on hot days in these communities.	• Plant trees on brownfield sites or convert brownfields into parks, community gardens, or other uses that decrease GHG emissions or help provide shade and lower surrounding temperatures. • Well-placed green spaces can help reduce flooding during intense storms. For example, rain gardens can reduce community flood risk.

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Brownfields Redevelopment Solutions for Community Challenges

Vulnerability to Extreme Weather Events

Community Challenges	Possible Solutions
Extreme weather events like big storms, floods, and heat waves can disrupt community services that some residents rely on for their health and wellbeing. • Older people, chronically ill people, and people with disabilities may rely on electronic medical equipment, refrigeration for medicines, and paratransit to access medical care. These services require electricity and clear roadways which may be unavailable during a disaster. • Heat waves can lead to serious health problems for priority populations like children and older people. • Flood waters can leave people stranded and cut off from needed care and supplies.	• Brownfields can be redeveloped into community centers that help community members escape the heat, access electricity, and receive medical care during and after extreme events. • Brownfields can be redeveloped into solar power generation and storage sites. These sites can provide backup electricity to power critical equipment during power outages.

Disclaimer: This document was created to help Community Change Grant applicants think through various potential solutions to the problems their community may be facing. All the listed "Community Challenges" and "Possible Solutions" are only examples. We did not attempt to list all possible challenges or solutions.

For more information on brownfields redevelopment, see EPA's Brownfields and Land Revitalization pages and the Climate Smart Brownfields Manual.

For more information on the Brownfields Redevelopment Climate Action Strategy, read Section I.G and Appendices C and F of the Notice of Funding Opportunity (NOFO).

For further questions regarding technical assistance, please contact EJ_TechAssist@epa.gov or call 1(800) 540-8123.

For questions regarding the Notice of Funding Opportunity (NOFO), please contact CCGP@epa.gov.

http://bit.ly/CCGTA