



Downtown Piqua, Ohio

Green Building & Redevelopment

What approaches can communities take to balance redevelopment, green building, and historic preservation?

Communities develop over time. The building stock within each community serves as a testament to the ebbs and flows of development over the years. Even edge communities that are still developing outward have older, existing buildings, overwhelmingly in private ownership, that pose sustainability challenges. Structures built for a particular use, or in a particular style, may have design characteristics that limit the range of alternative uses.

Older homes and commercial buildings are more likely to have issues related to accessibility for people with disabilities, or health hazards such as lead pipes, lead paint, or asbestos. Older buildings may be less water and energy efficient. Also, the buildings may just be (or look) “dated.” This mix of concerns may result in reduced investment in the parts of communities with older buildings, eventually lowering property values and tax revenues.

The pairing of [green building](#) and [historic preservation](#) may present a strategy for communities to revitalize neighborhoods, preserve character, and bring back investment. These buildings have the advantage of existing infrastructure, including utility lines, and the fact that they are already built. Demolition of existing

buildings or construction of new buildings is relatively expensive. Conversely, retrofitting a building is a fraction of the cost. Creative ideas for adaptive reuse of a building, or creative retrofit, can preserve character, enable new uses, and increase a building's energy efficiency. A community's codes and ordinances need to balance the goals of redevelopment, green building, and historic preservation, so that no single objective impedes the others.

Green building is also an essential sustainable approach for new development. Communities need to encourage the construction of new buildings that are healthy human environments (no off-gassing of VOCs in materials used), that use less energy and water, that incorporate natural light, that preserve natural resources and local habitats, and that use sustainable materials. These practices will result in future building stock that ages well and costs less to upkeep.

What Communities can do

This chapter recommends ways that communities in the Miami Valley can encourage sustainable building practices for both new and existing structures. Complementary topics and suggestions related to compact development, mixed-use, and walkable districts can be found in the Land Use and Development chapter. The Energy chapter has resources on facilitating renewable energy. Finally, the Water Quality chapter recommends ways to reduce development impacts on surface water and groundwater.

Community Education & Outreach

- As part of climate change planning, track and publicly report carbon emissions. Set a goal to reduce emissions from buildings in your community. **BYG**
- Integrate energy efficiency and healthy homes resources and programs to provide a one-stop approach for assistance.
- Include green building, historic preservation, and healthy house tips in civic publications (newsletters, websites, etc.). Preservation Dayton provides [guidance](#) on historic preservation. The Bay Village Green Team provides [an example](#).
- Educate building occupants about how building materials impact their health from organizations such as [Mindful Materials](#) and the [International Well Building Institute](#).
- Host educational seminars from U.S. Green Building Council, Ohio Community (USGBC Ohio) or Preservation Dayton on green building and/or historic preservation topics.
- Share information about energy saving opportunities from [window replacements](#) with community residents.
- Encourage your school district to adopt green building principles when building new schools or rehabilitating existing schools. The State of Ohio requires that new schools receiving state support achieve LEED-Silver status. However, districts can adopt their own standards for renovations or self-funded projects. (LEED stands for Leadership in Energy and Environmental Design, and is the leading green building standard.)
- Show support for green schools projects by participating in a [Green Apple Day of Service](#).
- Where buildings are being demolished, encourage “deconstruction,” which reclaims building materials and recycles

construction waste, reducing the amount of material sent to the landfill.

- Share [solar-ready construction guidelines](#) with the development community and residents.

Internal operations

- Adopt an energy efficiency program with targeted reductions in energy use in city buildings and operations. [Cincinnati has a Climate Action Plan](#) with an energy goal to be carbon neutral by 2035 and to reduce energy usage by two percent annually.
- Set a minimum green building standard (e.g. LEED Silver, [Enterprise Green Communities](#)) for all new construction and major renovations in municipal buildings. Many standards exist, including [EnergyStar](#), [LEED](#), and [WELL](#). Cleveland's [Sustainable Municipal Building Policy](#) is an example.
- Train building and planning department staff to provide technical assistance about green building.
- Set healthy building and community goals using healthy building standards (e.g. WELL, Fitwel) for new construction and major renovations.
- Maintain municipal buildings and grounds using safe, non-toxic products.

Ordinances and policies

- Create a sustainable building committee to explore opportunities and recommend policies.
- Green building guidelines and certification — Encourage the development of green buildings with special guidelines and recognition. Orange Village's [Orange Goes Green Certification Program](#) is an example of a community recognition program for

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Local Contacts

- Architectural resources for Green Building and Historic Preservation — Jane Treiber, AIA Dayton, 937.291.1913, info@aiadayton.org
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- Green Building/Policy — Jenita McGowan, Cleveland Chief of Sustainability, 216-664-2405, JMcGowan@city.cleveland.oh.us
- Healthy Housing — Mandy Metcalf, Environmental Health Watch, 216-961-4646, Mandy.Metcalf@ehw.org
- Historic Preservation – Holly Hornbeak, Dayton Planning & Community Development, 937.333.3681, Holly.Hornbeak@daytonohio.gov
- Preservation Dayton – Monica Snow, 937.234.4704, preservation227@gmail.com
- Passive House design — Alex Melamed, Green Generation Building Co., Yellow Springs, OH, 937.361.9705
- Green Schools – Nadja Turek, Woolpert; nadja.turek@woolpert.com, 937.531.1287
- Tax Abatements—Paul Yankie, Green Building Consulting, pyankie@greenbldgconsulting.com

green residential construction and commercial site development. **BYG**

- Healthy building incentives – Make wellness-focused buildings a priority for publicly financed projects.
- Green building incentives — Make green building a requirement for public financial

incentives. For example, [Cincinnati offers](#) increasing tax abatements for higher levels of LEED certification. Cleveland's [residential tax abatement](#) for new construction and major remodeling projects requires developers to meet a green building standard (e.g. [LEED Silver](#), the [Enterprise Green Communities](#), [Passive House](#), [Living Building](#) Challenge, or the National Association of Home Builders' [Green Building Standard](#)). **BYG**

- Historic preservation — Sustainability includes renovation and adaptive reuse of older buildings to extend the life of the valuable materials in those buildings while preserving the historic character of the community. Communities can promote historic preservation and gain access to state grants by becoming a [Certified Local Government](#) under the state's Historic Preservation Office and by adopting a local [Historic Preservation Ordinance](#).
- Create a tax incentive program - Offer tax breaks for investments that maintain historic homes, and/or tax abatements to construct green buildings. Involve historic preservation advocates when developing strategies for vacant buildings and demolition. [Cincinnati's tax abatement](#) program is an example.
- Housing management — To protect the quality of existing housing stock and promote healthy indoor air quality, develop and enforce housing management codes for maintenance, point-of-sale inspections, and rental registrations. Requirements can be tied to proactive, healthy home inspections and lead paint maintenance requirements. Also, require vacancy and foreclosure registrations.

Broader collaboration

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Resources

- [Green Buildings for Cool Cities: A guide for advancing local green building policies](#)
- [Financial incentives and regulatory programs for green buildings in Ohio](#)
- [Historic preservation resources](#)
- [Life-cycle analysis and energy performance of public buildings](#)
- [U.S. Green Building Council of Ohio](#)
- [National League of Cities: Green Buildings](#)
- [WELL Building Standard](#)

- Support the strengthening of state building codes to require better insulation, energy performance, water conservation, and other green building practices. Sustainable building codes would reduce the need for special green building certifications, which can be expensive to obtain.
- Integrate the recommendations of the MVRPC [Going Places](#) Regional Land Use Vision into community comprehensive planning and encourage neighboring communities to do the same.
- Be engaged with regional efforts to develop financing programs for energy efficiency and renewable energy projects — See Energy chapter.
- Work with USGBC Ohio to expand programs to assist with upgrades of commercial and residential buildings. [Forming a 2030 District](#) is one such public-private partnership opportunity.
- Support financing programs for healthy home interventions, such as medical insurer reimbursement for health-related home repairs.
- Advocate for continued historic preservation tax credits and other

preservation funding at the federal and state levels.

- Advocate for tax abatements for green buildings that adhere to LEED standards (e.g. Cincinnati's tax abatements has led to Ohio's ranking as the #7 State with Green Homes).