



**PLANNING AND ZONING
DEPARTMENT
PLANNING DIVISION**

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July 5, 2013

Robin Harlow
Technology Manager
Iowa State Association of Counties
5500 Westown Parkway, Suite 190
West Des Moines, Iowa 50266

Dear Robin:

Thank you for inviting Johnson County to apply for a 2013 ISAC Excellence in Action nomination for its new Johnson County Green Building Certification Program. On behalf of the County, I am submitting our completed summary for your consideration. We are excited about the County's new program and how it supports the construction of single-family homes with sustainable features.

Please contact me if you have any questions or concerns via phone at 319-356-6083 or via email at rdvoark@co.johnson.ia.us.

Sincerely,

Rick Dvorak
Planning and Zoning Administrator

Attachment

Johnson County Green Building Certification Program Johnson County, Iowa

Iowa State Association of Counties
2013 Excellence in Action Awards Application
Submitted July 5, 2013

Contact: Rick Dvorak, Planning and Zoning Administrator, Johnson County
rdvorak@co.johnson.ia.us

Prepared by Josh Busard, Assistant Planner, and Becky Soglin, Sustainability Assistant

(319) 356-6083 phone
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1. Abstract of the program

The Johnson County Green Building Certificate Program was developed in 2012 to encourage the construction of and to recognize new single-family homes that significantly exceed adopted building and zoning code requirements for energy efficiency and sustainable construction practices. This voluntary, free program distinguishes builders of truly green and sustainable homes from those builders who are simply “greenwashing” their products. The program also spreads awareness of green building practices to county residents.

The Green Building Certification Program applies to homes in unincorporated areas and includes 13 different areas of sustainability, ranging from the use of renewable building products to high levels of water and energy efficiency. Builders seeking certification must comply with three *required* sustainable construction techniques and at least eight of ten *voluntary* sustainable construction techniques. The *required* elements are improved storm water management, reduced water use and achieving cost-saving energy levels. The *voluntary* elements include such practices as sustainable landscaping, heat island mitigation, and diverting at least 50% of construction waste from the local landfill.

Program application and documentation can be completed online at www.johnson-county.com/greenbuild. Program development included input from the Iowa City Area Home Builders Association and cooperation among Johnson County’s Planning Division, Building Division, and Information Technology Department.

2. The problem/need for the program

As the residential construction sector regained strength, County staff noticed that terms such as “green,” “sustainable,” and “energy-efficient” were becoming commonplace, and many county residents were interested in and wanted to learn more about the benefits of a green home. To capitalize on the sustainable construction trend, builders and developers were branding themselves as “green.” Unfortunately, staff found that many of the homes built by “green” builders were no more energy efficient or more sustainable than a newly constructed home that fully complies with existing building and development code requirements. This practice of misrepresenting sustainable features is known as “greenwashing.”

It was also brought to the attention of County Building Division staff, that the Iowa City Area Home Builders Association was interested in creating a model Green Building Certification program that could be an example to its members and Johnson County’s municipalities. It was important to the Home Builders Association that the program be inexpensive and less intensive than the leading green building certification programs in existence today, yet still be meaningful, rigorous and subject to independent inspection by a third party. Also, as part of the County’s strategic planning process, the Board of Supervisors adopted a broad goal to encourage more sustainable development practices.

Seeing a public need and having support of elected officials, County staff set out to develop the Green Building Certification Program. Staff feels strongly that this free and voluntary program will recognize local builders who go above and beyond code compliance regarding sustainability and will prove valuable to Johnson County residents, who are becoming more knowledgeable when it comes to determining levels of sustainability.

The program also builds on the County’s momentum in fostering green practices. In the past three years, we have adopted a Rural Cluster Zoning Ordinance to encourage open space among residential lots, created a Stormwater Management Ordinance for major subdivisions and site plans and become a Small Wind Innovation Zone. Programs and policies that take into account and augment one another lead to better outcomes.

3. Description of the program

Description: Program concept and creation

In 2012, Johnson County developed and launched the Green Building Certificate Program. As a voluntary program for new residential construction, the Green Building Certificate Program is designed to encourage local builders in Johnson County to construct single-family homes that include green, or sustainable, features, and to recognize those who actually build such homes. The program is also intended to spread awareness of green building practices to Johnson County residents. This innovative new program was officially adopted by the Johnson County Board of Supervisors in November 2012. The Board's adoption was a direct result of their Strategic Planning effort for the County as a whole.

This new program does not add additional fees to the building permit process. To qualify, the homes must be located in the county's unincorporated areas. The program will recognize builders and homeowners who go beyond code compliance to use energy-efficient and other sustainable features, such as locally resourced materials, in a home's construction. To earn certification, homes must meet three required techniques and at least eight of 10 voluntary techniques. The required elements are improved storm water management, increased water efficiency, and implementing energy efficiency features so that the home is at least 15% more efficient than current International Energy Conservation Code standards.

Some of the voluntary techniques include low-impact landscaping, use of renewable, recycled, salvaged or local materials, and limiting the amount of space in the home that is heated or cooled to 1,750 square feet. Builders also may opt to take steps to reduce a home's heat island effect and implement a construction waste management plan to divert half of construction waste from the landfill.

Researching, planning and launching the program took approximately 10 months. Program development included studying national and other existing green building programs and getting input from local builders, including the area Home Builders Association, which sent a letter of support to the Johnson County Board of Supervisors. Internally, the County's Building Inspection Division, Planning Division (including the Soil and Water Conservation Specialist and the Sustainability Assistant), and Information Technology Department worked together on the technical and logistical aspects of the program. In particular, County staff wanted to ensure that inspectors and planners could offer support and guidance and that an online portal would make it easy for participants to submit documentation.

Summary of specific primary staff and entities that collaborated on this project:

- Planning Division
 - Josh Busard, assistant planner, AICP, LEED-AP
 - Kate Giannini, Soil and Water Conservation Specialist
 - Becky Soglin, Sustainability Assistant
- Building Inspection Division
 - Neil Bombei, Building Inspector III
- Information Technology Department
 - Gary Yoder, Webmaster
- Johnson County Board of Supervisors
- Iowa City Area Home Builders Association

Description: How the program works

Johnson County's program is modeled after the National Green Building Standard International Code Council (ICC) 700-2008 and the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system. The green design standards are geared toward the owner or builder who is interested in participating in the green movement yet may not be ready to invest the time or money to achieve certification under the LEED rating system or the National Green Building Standard ICC 700-2008.

Builders wishing to participate in the program must complete all required forms, which will be reviewed by county staff. The program is not intended to be a burdensome process for those who elect to participate. To further streamline the certification process, all credit templates, project information, and supporting documentation can be completed electronically and emailed. The process is designed to be as user-friendly as possible. Builders who wish to participate in the program must fill out forms that are available online at the County's website: <http://www.johnson-county.com/greenbuild> and provide supporting documentation such as receipts and material safety data sheets.

Upon successful completion of the program, builders and the home (homeowner) will be sent a certificate and recognized at a Board of Supervisor meeting.

4. Use of technology

The new program draws on existing codes, including the ICC 700-2008, and on existing rating systems, LEED, both of which have important online access features. The Johnson County Green Certification Program is entirely online. Planning and Zoning and Building Inspection Divisions partnered with the County's Information Technology Department to create the portal, logo and supporting document templates. The dedicated website is <http://www.johnson-county.com/greenbuild>. Highlights of the online accessibility include:

- Downloadable Excel template forms for the required techniques and the voluntary techniques
- Electronic form submission through email or fax
- Downloadable builder check off and information sheets
- Use of QR codes on materials for smartphone scanning
- Dedicated "vanity" website url and email address (greenbuild@co.johnson.ia.us)

5. The cost of the program

The primary cost for developing the program was staff time of the Building Inspection Division, Planning Division and Information Technology Department. It took an estimated 100 staff hours (split primarily among the five staff members listed above) to plan and develop the program, including meetings, creating the template sheets and launching the website.

Minor costs (less than \$30) covered printing banners, small posters and handouts for an outreach event. The handouts also are offered at the planning desk as takeaways. Printing of brochures and signage (done in-house) for additional events should cost less than \$15 per event. The website is maintained in-house and has not been time-intensive to maintain.

Overall, staff time to maintain the program will be manageable since questions and tasks related to the certification program are typically incorporated into the normal builder construction process. For example, builders have inquired about how to participate when they are asking other questions about the permitting process. Although no inspections have yet been carried out for homes applying to be green certified, the staff planned the program so that most inspections can be done as part of other routine inspections. It is estimated that an average of one extra trip may be required for some green building-related inspections. As noted earlier, the staff endeavored to ensure that the program is not a burden to applicants or staff, as it is well known that time is money.

6. The results/success of the program

As intended, the program has raised awareness among builders and the general public. Several builders have inquired about the program and had their questions answered. Three builders have said they intend to use the program for their next development. While no builder has yet applied for the program, the groundwork has been laid for this next, and obviously desired, level of participation. With the building industry revitalized, more builders should be able to consider the program.

Outreach activities to date have included a news release, a story in the quarterly newsletter of the Iowa City Area Home Builders Association, an alert sent to all zoning administrators in the state, and an information table at a public event held at the Iowa City Environmental Education Center. Two visitors at the public event said they would share the brochures with their municipalities in Johnson County to encourage adoption of similar programs. In addition, another county has asked for more information about our program as they consider how to incentivize the private construction of green buildings in their county.

The program website is a resource that helps builders and the public understand true green practices, as a goal is to diminish instances of greenwashing.

7. Worthiness of an Award

To the best of our knowledge, no other county in the state has adopted a green building certification program. Our program was designed to fill a gap in the green building effort—that it be inexpensive and less intensive than the leading green building certification programs in existence today, yet still be meaningful, rigorous and subject to independent inspection by a third party. We aimed to make our program innovative, free (to builders)/low-cost (staff time) and equitable.

Johnson County listened to the builders, assessed the needs of the general public, and saw an opportunity to provide both more education and more opportunities when it comes to building green. An important feature of the program has been to advance partnerships both externally and internally. As noted, local builders' needs and input were important to program development. At the same time, the program also considers the consumer needs and protection of the potential homeowner who deserves to have genuine green, or sustainable, features in their new home. Internal cooperation among several county entities was also key.

The new program also went to lengths to make use of electronic technology to reduce program burden on the applicant and staff. The online format also provides flexibility for the future, as updated forms can easily be provided as green techniques evolve.

Last, but certainly not least, the program was endorsed by our Board of Supervisors and carries out goals of the County's overall Strategic Plan and targeted Sustainability Plan.