Building Clean
Policies to Accelerate the Presence of Locally Made, Healthy Materials in Multifamily Housing

Building Clean is a program operated by the BlueGreen Alliance Foundation (BGAF) that aims to educate builders and other housing stakeholders about the importance of using energy- and water-efficient building products made in the U.S. and free from chemicals that could impact the health of residents and workers. Using healthy and locally made materials in retrofits of multifamily, affordable housing projects both increases the demand for U.S.-made energy-efficient products and decreases exposure to harmful chemicals found in many housing products.

MAKING THE CASE FOR HEALTHY PRODUCTS

Poor housing conditions—including plumbing and electrical deficiencies; water leaks and intrusion; and pests—as well as building product choices—including insulation, paint and sealants—are all associated with a wide range of health conditions. These include respiratory illness, asthma, lead poisoning, and cancer. Along with helping to tackle health issues, energy-efficient products improve and mitigate the energy burden faced by low-income residents. On average, low-income households pay 8.1% of their income on home energy bills—3.5 times the amount that high-income households pay. If low-income housing stock were brought up to the efficiency level of the average U.S. home, it would eliminate 25% of the average energy burden on low-income households.¹

MAKING THE CASE FOR LOCALLY MADE PRODUCTS

Encouraging local purchasing within state and city procurement policies or with stand-alone buy local policies boosts the local economy and supports domestic manufacturing. Manufacturing jobs often have higher pay and better benefits than similar jobs in other sectors and are vital for rural areas within states that are reliant on manufacturing.² Insisting on U.S.-made products.
in close proximity to a project site helps sustain local manufacturing of these products and their supply chains. Structuring policies that support the purchase of locally made, energy-efficient products not only helps maintain quality jobs, it generates local economic activity and drives overall economic innovation.

BUY LOCAL, BUY HEALTHY IS THE RIGHT CHOICE

Building Clean's "Buy Local, Buy Healthy" motto is a concept and approach to purchasing building products that focuses on supporting jobs in the local or regional economy, while lessening exposure to hazardous substances in the home through a better understanding of a product's ingredient content and how it might impact the health of residents and installers. When applied in conjunction with building products that are energy and water-efficient, this concept can help transform lives and communities by creating buildings that save resources, grow jobs, and protect public health.

The benefits of healthier retrofit products that are locally made are numerous. By ensuring the products used in affordable housing retrofits are healthy and locally made, we can create more energy-efficient jobs; improve affordable housing conditions; increase tenant savings; improve tenant comfort and health; and reduce greenhouse gas emissions. This toolkit contains effective and innovative policies and programs highlighting the commitment to healthy and locally made materials by cities, states, and utility companies. It provides links to specific policy language as well as case studies detailing the impact of buying local and buying healthy.

HOW CAN AGENCIES AND PUBLIC OFFICIALS WORK TOWARDS THIS GOAL?

Advocating for healthy and locally made energy-efficient products for affordable housing retrofits is an effective way to create energy-efficiency jobs and improve the quality of life for low-income residents. The most effective means to elicit change through the reduction of indoor chemical exposures is at the policy level. While education and awareness are vital, achieving significant change in occupant health from building materials is accomplished through legislative and regulatory modifications. Public officials, agencies, and utility companies can actively work towards this goal through language in their Qualified Allocation Plans (QAPs), city or state legislation, and utility low-income and multifamily rebate programs.

The best procurement policies offer direct and specific language detailing chemicals of concern, disclosure requirements, or product certifications. Language should also be clear and concise on what is mandated, incentivized, or recommended. The health of occupants and workers should also be a primary objective in screening for products.

To produce this toolkit, the Building Clean research team surveyed the QAPs of all 50 states, state policy for all 50 states, policies in 88 cities and 14 counties, and over 110 utility programs in 41 states and Puerto Rico.

WHAT CHEMICALS SHOULD BE AVOIDED?

The resources listed below provide information on common chemicals found in building products. This information can be used to make better procurement choices for green building programs, weatherization and utility retrofits, affordable housing projects, and city or state agency purchasing.

- **Building Clean Chemical Library**: A resource from BGAF that identifies common chemicals by product type, including insulation, sealants,
water filtration, and CFL light bulbs. This resource includes the health impacts of each chemical and offers safer alternatives.

- **International Living Future Institute (ILFI) Red List Chemicals:** The Red List put out by ILFI contains the most prevalent harmful chemicals used in the building industry. These chemicals pollute the environment, bio-accumulate up the food chain, and can harm construction and factory workers.

- **Perkins-Will Precautionary List:** The Perkins-Will list contains chemicals of high concern, chemicals on the watch list, and chemicals that have been retired from the precautionary list. Each chemical contains health impacts, a GreenScreen score, and pathways of exposure during manufacturing, installation, use, and disposal.

- **GreenScreen for Safer Chemicals:** This resource is a globally recognized tool that identifies hazardous chemicals and offers safer alternatives. GreenScreen offers guidance and resources for governments and other purchasing officials to assess potential hazards and make informed decisions regarding harmful chemicals.

- **Cradle to Cradle Certified Banned List of Chemicals:** Within Cradle to Cradle Certified products are a “banned list” of chemicals due to their negative health effects and hazardous features during their manufacture, use, and disposal. The banned list is divided into chemicals for technical nutrients and chemicals for biological nutrients.

**QUALIFIED ALLOCATION PLANS**

Qualified Allocation Plans (QAPs) are the guidelines through which states distribute low-income housing tax credits (LIHTC), a federal program that allocates tax credits to states on a per capita basis. States—typically through their housing finance agency—award the credits to developers through a competitive application process to expand and preserve affordable housing.

While states must ensure tax credit recipients abide by income eligibility and affordability requirements, they also have broad discretion in their distribution to align with a state’s policy goals. While the primary objective of QAPs is to increase the supply of affordable housing, states can prioritize other areas through their scoring criteria. Assisting vulnerable populations, preserving current housing stock, targeting energy efficiency, encouraging place-based strategies, and promoting occupant health can be preferred to varying degrees depending on preferences by the administering state housing agency.

Every year or two, depending on the state, housing finance agencies review and revise plans and invite public review and comment. During the public review time, interested stakeholders can encourage these agencies to include criteria that promote health and encourage buying local products.

**Building Certifications**

Most state QAPs use third-party building certifications to encourage green and energy-efficient building practices. There are 13 different third-party certifications referenced in various state QAPs, not including any state specific building certifications. In addition, 19 states require building certifications, and an additional 19 states award points to applicants that meet third-party building certifications.

Although these third-party certifications often include language that incentivizes healthy building practices and local sourcing provisions, they may not require either. As detailed in BGAF’s report on healthy building practices within building certifications, there are numerous ways certifications prioritize healthy building features. Standards for indoor air quality testing, ventilation best practices, and low-VOC materials and products all varied depending on the certification. The builder also has flexibility meeting the points system within these certifications and could prioritize other checklist items over healthy and local items.

States that desire to incentivize buying healthy and locally made products should structure their QAP guidelines to:
• Require rather than incentivize meeting third-party certifications; and
• Incentivize meeting portions of those certifications that include buying healthy and buying local.

Model Policy
**Washington:** The state of Washington requires that all housing receiving LIHTC funding reach its Evergreen Sustainable Development Standards. These standards include health and local incentives, awarding points for including:

- Low/no VOC paints & primers;
- Low/no VOC adhesives & sealants;
- Composite wood products that emit low/no formaldehyde;
- Non-vinyl, non-carpet floor coverings that do not contain PVC or chlorine; and
- Environmentally preferable materials: use environmentally preferable materials and/or materials that are produced within 500 miles of the construction site.

Buy Healthy Policies
Along with building certifications, states may also include health requirements in their QAPs. Research from BGAF shows that almost 60% of states list additional health-related policies outside of green building certifications. These policies reference concerns such as low-VOCs and air quality. In addition, these healthy building practices can set VOC or toxic material limits for products, place bans on products with certain chemicals, or require or incentivize product certifications. On the latter, several states include Green Label carpeting certifications for low VOC emission, while California mandates fiberglass-based insulation to meet the GREENGUARD Gold certification.

**Model Policy**
**Maryland:** Maryland’s QAP sets base level green standards for all projects, requiring that all projects meet certain air quality standards.

“The project shall make primary use of all the following Interior Air Quality criteria: Green Label carpeting and low toxic, low volatile organic compound (VOC) paint, primer, sealers, and adhesives. The architect must reference a national standard such as Green Seal, South Coast Air Quality Management District, Bay Area Air Quality Management District, or equivalent standard. In addition, unsealed engineered or composite wood products free of added urea formaldehyde must be used.”

The QAP also includes additional criteria for new construction and gut rehabilitation projects, requiring that all projects are certified under the current version of Energy Star New Homes or Energy Star Multifamily High Rise rating systems.

**Georgia:** Along with requiring low-VOC interior wall/ceiling and floor finishes, Georgia’s Department of Community Affairs—which oversees the state’s QAP—highlights the health of residents in their housing strategic goals. One of six priorities for allocating resources is the “Health Outcome for Residents.”

“The Health Outcome for Residents: Physical and mental health are necessities for thriving individuals and families. The location where a household lives strongly influences household health through components like access to quality care, education, and healthy foods. In addition, safe, quality affordable housing provides the foundation and central location for encouraging healthy lifestyles. As such, the Department of Community Affairs has a strong commitment to encouraging better health outcomes for residents through site selection, site design, community partnerships, and focused services.”

Buy Local Policies
Some states incentivize sourcing materials in-state or within a specified radius of the project. Local sourcing works to reduce life-cycle costs and supports energy efficiency and manufacturing jobs within the state. Although including these policies within state QAPs has the potential to spur job growth and creation, local sourcing incentives are less commonly found in QAPs. Only five states have a local sourcing provision within their QAP guidelines.
Model Policy

**Michigan:**14 Michigan mandates that all projects must “demonstrate the use of products and goods that are manufactured by Michigan-based corporations and incorporate them into the proposed development.”

GOVERNMENT OVERSIGHT

There are a handful of opportunities for states and cities to implement initiatives targeting healthy building practices, reducing toxic chemicals, and prioritizing local sourcing. They can utilize legislation, executive orders, and environmentally preferable purchasing policies to promote the purchase of local and healthy materials and products. Many cities and states already operate dynamic sustainable purchasing programs and green building programs that mention healthier materials or locally made materials, but most policies do not have firm requirements for these materials. These governmental measures can have a significant impact on limiting hazardous toxic chemical exposures to residents, but they are often overlooked when creating these initiatives.

CITY POLICY

In the past few decades, many cities across the country have demonstrated their commitment to sustainability by instituting purchasing and green building programs that take materials, toxicity, recycled content, energy efficiency, renewable energy, resiliency, durability, bio-based content, and other attributes into consideration for purchases made by city departments or requirements for green building materials.

Cities have the opportunity to be at the forefront of buy local and buy healthy policies by working to strengthen language within environmentally preferable purchasing policies and green building requirements.

**Environmentally Preferable Purchasing Policies**

Environmentally preferable purchasing policies direct agency spending and can include both health and local sourcing provisions. The issue with many of these policies is the lack of stringent requirements, as many purchasing policies only serve as guidelines or recommendations. In most cases, city departments are simply encouraged to choose healthier or locally made products “whenever possible.” These policies can be strengthened with defined healthy product categories based on approved third-party labels that cities mandate for approved third-party labels that cities mandate for departments and should be encouraged to do so through approved product lists that are shared with departments.

Model Policy – Buy Healthy

**Ann Arbor, MI:**15 One of the City of Ann Arbor’s goals in their environmentally preferable purchasing plan is to improve health through reduced exposure to harmful chemicals contained in building materials and consumer products. Environmental factors, such as total life cycle costs, potential impacts on human health, and pollutant releases and toxics—such as Persistent Bioaccumulative Toxics (PBTs)—are to be considered in product and service acquisitions. When determining if a product is environmentally preferable, vendors and contractors should consider asthmagen-free, chlorofluorocarbon (CFC)-free, flame-retardant-free, free of antimicrobial chemicals, locally sourced, low-Volatile Organic Compound (VOC) content, and low toxicity, among other preferences.

**Portland, OR:**16 The City of Portland, Oregon’s sustainable purchasing policy includes a best practices section outlining strategies for harmful chemicals reduction that include utilizing third-party certifications for less-toxic and low-emitting interior finishes, cleaning and maintenance products, and electronics products. This policy also includes an “emerging best practices” section with a longer timeframe for widespread implementation. This section suggests that city officials request product ingredient and hazard screening assessment disclosures from manufacturers in order to select products that do not contain or generate harmful chemicals throughout their life cycle.

**New York City, NY:**17 New York City has an extensive environmentally preferable purchasing document available with minimum standards set
for a wide variety of building and construction products, including appliances, architectural coatings, electronic equipment, HVACs, lighting, office equipment, paper products, and plumbing fixtures.

Each product section contains covered products, the definition of the product, and the maximum allowable concentration of VOCs in grams per liter.

**Model Policy - Buy Local**

Some environmentally preferable purchasing policies include recommendations for city officials to buy locally in an effort to reduce transportation emissions.

**Minneapolis, MN:** As with many cities that include local options in their environmental purchasing policies, Minneapolis provides a list of standards to consider when determining whether a product is environmentally preferable. This list includes “available locally.”

“In practice, the objective is to purchase products that have reduced environmental impact because of the way they are made, transported, stored, packaged, used and disposed of.”

**Sacramento, CA:** In Sacramento, buying locally is directly tied to reducing emissions.

“Factors to consider when comparing bids and proposals and for determining if a product or service has environmentally preferable attributes: Buying locally to reduce emissions and transportation costs.”

**Madison, WI:** For city purchases under $5,000, city officials are encouraged but not required to use local vendors. Local vendors are also given a 1% preference for bids of over $5,000. This policy defines local vendors by the portion of employees working at facilities in the local area (minimum 50%), the portion of ownership vested in residents within the local area (minimum 50%), and the portion of business sourcing within the local area (minimum 15%). The local purchasing policy cites two primary public benefits: buying locally retains and circulates more money in the local economy and encourages residents and businesses to also buy locally. In addition, Madison created an online directory of local businesses to assist in identifying local purchasing options.

**Green Building Policy**

The most common type of policies found in city research are green building requirements and incentives. Most policies base their definition of green building on a third-party standard such as LEED, Enterprise Green Communities (EGCC), Green Globes, Living Building Challenge, and NGBS ICC. Other than LEED and EGCC, certifications were typically offered as one of a menu of options that developers can follow but not mandated.

Beyond green building certification, several cities have policies that require the use of healthy or local products. These health measures typically focus on VOCs and formaldehyde with Green Seal, Green Label, and FloorScore certifications most commonly referenced. As with environmentally preferable purchasing policies, green building policies have healthier and locally sourced provisions as a menu of options for developers rather than mandating their inclusion. Some of the model policies showcased below are examples of more stringent health requirements for buildings.

**Model Policy – Buy Healthy**

**Saint Paul, MN:** Located within its sustainable building policy, Saint Paul addresses health by mandating indoor environmental quality (IEQ) to be addressed via ASHRAE ventilation standards, a construction IEQ management plan, and the use of low-emitting materials. For residential and commercial municipal projects, developers can choose between meeting LEED, Green Globes, Green Communities, or Minnesota State Guidelines. The city also mandates a construction IEQ management plan and the use of low-emitting materials to address IEQ.

**Los Angeles, CA:** Projects have to incorporate sustainable building methods and can meet this requirement by gaining at least 8 points from a list of available options. This list includes 1 point for the use of no-VOC interior paint and 1 point for cabinets, countertops, and shelving free of...
added formaldehyde and sealed with a low-VOC primer or sealant. Projects can also receive 1 point using of CRI Green-Label, low-VOC carpeting, and low-VOC adhesives, and 1 point using of formaldehyde-free insulation.

**Austin, TX:** The City of Austin developed its own set of green building certifications, which have mandatory measures that focus on low-emitting and certified materials, along with voluntary measures focused on more stringent health guidelines and local materials. Paints, primers, and coatings must not exceed the VOC limit of Green Seal Environmental Standard, and coatings to the interior building cannot be better than the South Coast Air Quality Management District (SCAQMD) Rule 1113. Any product category without a low-VOC option must also be verified to account for non-verified products.

For low-emitting materials, the city offers one point for using low-VOC sealants and adhesives, composite wood and agrifiber products, insulation with no added formaldehyde, ceiling and wall systems that are in accordance with California’s Department of Public Health standards and exterior products that do not exceed VOC limit of the Green Seal standard. Points for “building material use reduction” are also awarded for using Cradle to Cradle certified products.

**Model Policy – Buy Local**

**Allentown, PA:** For businesses and developers seeking financing through the Allentown Neighborhood Improvement Zone Development Authority, the City gives preference to projects that “involve the use of City, Pennsylvania, or domestically sourced materials.”

**Yonkers, NY:** Yonkers developed its own Green Development Workbook, which policy incentivizes local sourcing through a regional material selection section where developers can gain up to 10 points for using products that “were extracted, processed, and manufactured within 500 miles of the project for a minimum of 50%—based on cost—of the building materials’ value.”

Framing materials, exterior materials, concrete/cement and aggregate, drywall and interior sheathing, and flooring materials each qualify the developer for two points.

**Austin, TX:** Austin’s Green Building Policy contains a Sustainably Sourced Materials section “to reduce the environmental burdens of materials and products acquired to construct buildings and to upgrade building services and help support the state economy.” Developers can choose between performance and prescriptive options, with the former offering builders more points for materials or products containing salvaged or refurbished materials, recycled content, or are extracted and/or manufactured regionally within Texas. The minimum requirement is 25%, with additional points offered on a sliding scale of up to 75% of products and materials produced in-state. The prescriptive option allows up to three points, with one point being awarded for a minimum of two items extracted and/or manufactured in Texas. These items can include gypsum board, insulation, cabinets, doors, studs, or flooring.

**STATE POLICY**

States can also leverage their purchasing and green building requirements to encourage the use of healthy and locally made products.

**Buy Healthy**

While not all states operate sustainable purchasing programs, some states have developed comprehensive programs that lead to procuring healthier products. Like city environmentally preferable purchasing policies, these state policies require state agencies to follow suggested guidelines when making purchases.

While many of these purchasing policies offer only loose guidelines, nearly a dozen states have policies that set clear requirements and hold their agencies accountable to procurement standards within these guidelines.

**Model Policy**

**Colorado:** The State of Colorado's purchasing policy contains specific strategies for reducing toxic elements.
To the greatest extent possible, no product or service purchased by the State of Colorado should contain, emit, create, or by use, application, or practice will introduce any of the following:

- Carcinogens and/or reproductive toxins, or other highly toxic ingredients that are masked by dilution;
- Persistent bioaccumulative toxins, including lead, mercury, dioxins and furans, for example.....

Colorado’s Environmentally Preferable Procurement (EPP) program also recommends that buyers of building products should “purchase products containing the lowest amount volatile organic compounds (VOCs)” and “all purchased materials (such as paint, carpeting, flooring, adhesives, furniture, casework, etc.) shall be assessed for environmental impact using life-cycle analysis or third-party certification as available.” The use of chlorofluorocarbon-containing products are also to be phased out, and products containing the chemical compound are no longer to be procured.

Oregon: Oregon runs an extensive environmental purchasing program that requires state agencies to consider life-cycle costing and sustainability as part of the best value analysis of the product or service.

Oregon’s green chemistry program sets strict standards for non-toxic products and encourages the research and development of green products in Oregon to achieve the state’s goal of reducing or eliminating the use or generation of hazardous substances. In addition, in an effort to position the state to capture economic opportunities as the economy moves to cleaner, non-toxic chemicals, an “environmentally-friendly purchasing” executive order was introduced for safer, less toxic products. State agencies are directed to “integrate policies to promote the use of safer alternatives to toxic chemicals through green chemistry.” The policy requires state agencies to purchase non-toxic building materials, office supplies, and cleaning products unless no other options are available.

California: For new, renovated, and existing buildings, the State of California produced guidelines for indoor environmental quality that state agencies must follow. The state requires building materials such as adhesives, sealants, caulks, paints, coatings, and aerosol paints and coatings meet California Green Building Standards Code (CALGreen) VOC content limits. In addition, UL GREENGUARD Gold is listed as a certification option for resilient flooring systems.

Massachusetts: The state’s Environmentally Preferable Procurement (EPP) Program offers a comprehensive guide to assist state agencies in identifying and procuring sustainable products and services. The products index for building materials provides a list of air quality standard requirements for paint products and supplies and recommended certifications for adhesives, such as Cradle to Cradle, Green Seal, SCS FloorScore or Indoor Advantage Gold, UL EcoLogo or GREENGUARD Gold, and Carpet and Rug Institute’s Green Label Plus. They reassess their EPP each year and established a Toxics Reduction Task Force to analyze how they can minimize Massachusetts’ use of materials and products including toxic chemicals.

Buy Local
States can also encourage agencies to buy in-state or U.S.-made products. Most policies in this area provide a percentage preference in the price for an in-state product. Almost all states have some sort of local sourcing policy, although not all of them deal with building products. States also use these policies to incentivize hiring locally. Florida, West Virginia, and Mississippi provide a preference to companies that employ a certain number of in-state residents in their facilities.

Model Policy
Michigan: The State of Michigan requires the use of Michigan-made products as part of their minimum construction standards for all state-owned or leased buildings.

“When possible, specify or use products that are extracted, harvested, recovered or manufactured within 500 miles of the project site.”

Indiana: Indiana’s Executive Order 05-05 set a goal to source 90% of products from Indiana-based vendors and manufacturers and 100% of
products from U.S. sources if a U.S. alternative is available.

They provide different tiers of benefits to the U.S. and in-state suppliers, the highest being a 15% preference for small businesses based in the state.

“Subject to such policies and procedures as may be developed and approved in accordance with paragraph 3 below, state procurement shall be subject to a “Buy Indiana” presumption requiring state agencies to buy their supplies and services from Indiana businesses...”

**Utility Rebate Programs**

Utilities across the country offer rebates for customers who purchase energy-efficient HVACs, appliances, insulation, lighting, window and door upgrades. These rebates are offered to residential and commercial customers through low-income qualified programs, new construction programs, and whole-home efficiency or savings programs.

Utility programs such as these have the potential to accelerate healthy and local materials in homes. Energy efficiency programs through utilities work to reduce emissions, save money for customers, and create jobs. However, utility companies rarely mention healthy materials on their websites and our research team only found two programs that directly incentivize buying in-state manufactured products.

Utilities could address some of the most harmful chemicals introduced in low-income and affordable housing if they highlight products such as healthier insulation and sealants in weatherization programs and healthier paints, adhesives, and flooring in larger whole-home efficiency programs. In an even smaller way, utilities could work to include more information on their websites and materials that promote their rebate programs about choosing healthier products.

**Model Program – Buy Healthy Efficiency Vermont’s Zero Energy Modular Homes Program**

Efficiency Vermont is an energy efficiency utility that provides Vermont residents with technical services and financial support, including rebates for energy-efficient products and information on DIY weatherization.

In 2013, Efficiency Vermont began its Zero Energy Modular Homes (ZEM) Program in an attempt to provide quality housing that low-to-moderate-income prospective homebuyers could afford.

ZEM units include the following energy efficiency measures:

- High levels of insulation;
- Detailed air sealing;
- Triple-paned windows;
- Tier 3 ENERGY STAR appliances;
- LED lighting;
- Grid-tied photovoltaic (PV) solar cells;
- CERV ventilation;
- Heat pump water heater; and
- Air-source heat pump.

These homes come with all appliances, including a stove, dishwasher, washer-dryer, and HVAC. In addition, Efficiency Vermont offers a multitude of rebates and incentives for Energy Star products.

Efficiency Vermont and Vermod Homes work to address the health impacts of housing materials on residents. They select GREENGUARD certified bamboo floors, no-VOC primers and paints, low-VOC adhesive for countertops, and fiberglass insulation, materials proven to have little or no negative effects on human health.

Because the ZEM units produced by this program are safe, durable, healthy, comfortable, and low maintenance, they circumvent many of the stresses that low-income and elderly residents face in their homes. The relationship between health and housing is indisputable, and as such, health should be a central focus when utility programs consider materials for retrofits and weatherization. The ZEM Program demonstrates that healthy choices can be done well, leading to both energy savings and healthier occupants.
Consumers Energy is a public utility that provides natural gas and electricity service to 6.7 million Michigan residents. In 2011, Consumers Energy became a founding partner of Pure Michigan Business Connect (PMBC), an initiative that originated to connect small and large businesses with Michigan suppliers in an effort to increase in-state spending. According to PMBC, one job is created for each $200,000 investment in local spending.

Like many utilities, Consumers Energy offers rebates for residential and commercial customers that invest in energy efficiency upgrades. Unlike most other utilities, Consumers’ offers additional incentives for customers that purchased products that are at least 50% manufactured within Michigan. This program began as a pilot on the commercial side in late 2012, focusing on hot water boilers, lighting, and hot water heating for business owners and contractors. The commercial “Buy Michigan” pays a 30% incentive bonus for any measures undertaken with Michigan-made products.

The residential “Made in Michigan (MIM)” program pays a flat bonus to customers who take on any of a handful of measures with Michigan-made products. Customers who take a whole-house efficiency approach with the “Home Performance with Energy Star” assessment program have access to the greatest number of incentives, but the Made in Michigan bonus can also be applied to the Insulation and Windows ad HVAC projects.
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ENDNOTES


7 Cradle to Cradle Products Innovation Institute, Cradle to Cradle Certified Banned List of Chemicals, 2012. Available online: https://www.c2ccertified.org/resources/detail/cradle-to-cradle-certified-banned-list-of-chemicals


18 City of Minneapolis, Environmental Purchasing Policy, 2008. Available online: https://www2.minneapolis.gov/media/content-assets/www2-documents/business/Environmental-Purchasing-Policy.pdf


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