



# Green Building Development Strategies for the Town of Bethlehem, NY April 2013

## Background

The Town of Bethlehem has taken several major steps towards planning for, and implementing, climate protection and sustainability initiatives in the community. Most recently, these efforts were branded into a comprehensive sustainability program, Sustainable Bethlehem, launched in 2012. The goals of the program include:

- Town government leads by example through improving energy efficiency and reducing greenhouse gas emissions in its operations and by actively promoting its own sustainability successes and informing residents of available resources to become more sustainable at home and work
- Foster a prosperous business environment for both local and new businesses focused on delivering products and services that meet the current and future needs of Bethlehem and the region
- Enhance Bethlehem's character to incorporate more mixed use options creating a live, work play environment
- Support a safe and accessible network of bicycle and pedestrian infrastructure that is well maintained, and extensively utilized for commuting, recreation, and daily trips
- Conserve open space and protect natural areas through effective land use policies
- Provide diverse, affordable, and energy efficient housing options



In its 2005 Comprehensive Plan, the Town identified the following initiative: Encourage the use of Leadership in Energy and Environmental Design (LEED) standards. Similarly, the Draft Local Waterfront Revitalization Program (LWRP) recommends: Develop incentives for new buildings to meet LEED ratings. In its efforts to further pursue the intent of these initiatives, the Town is considering a number of sustainability development techniques that could be implemented through its land use policies and procedures. Through the Climate Smart Communities Regional Coordinator program managed by the Capital District Regional Planning Commission, VHB has developed this guidance to assist the Town in selecting the most appropriate strategy for promoting green building development within Bethlehem.

Local governments across the country have begun to adopt requirements or incentive mechanisms for new buildings to be designed and constructed using **standard green building and/or energy efficiency practices**. There are a number of ways to accomplish this through local planning and policy. Three approaches have been identified as most relevant for consideration by Bethlehem, including:



# Green Building Development Strategies for the Town of Bethlehem, NY April 2013

- Adoption of a local energy efficiency code more stringent than state energy code
- Creation of a “Feebate” program applied to green building or energy efficiency practices
- Attachment of green building or energy efficiency practices to development incentives and approvals

A description of each approach follows, highlighting the overall strategy, benefits and challenges of the strategy, and how it might be implemented within Bethlehem. Additionally, case studies and other resources have been provided when applicable.

## Definition of Key Terms

### *Energy Efficiency:*

The term energy efficiency, as used in this document, refers to the efficient use of energy in buildings. Because energy is commonly generated through the burning of fossil fuels, reducing energy use is an important component of minimizing the Town’s impact on the environment and reducing greenhouse gas emissions. While renewable energy is also important, those technologies do not reduce energy, but rather replace the energy source with a cleaner alternative. Energy efficiency involves improved technologies and design components to achieve the same or improved performance in the building using less energy.

### *Green Building:*

A green building is a building that has incorporated sustainable design features into its construction or renovation. Typically, such design elements include energy efficiency, water conservation, stormwater management, siting considerations, environmentally friendly building materials, waste reduction, indoor air quality standards, and other features that reduce environmental impact of the building and providing a safe, healthy, comfortable environment for its occupants. It is important to note that while a green building typically includes energy conserving or renewable energy components, energy is only one of several considerations.

### *LEED:*

Leadership in Energy and Environmental Design (LEED) is a rating system administered by the U.S. Green Building Council. It is perhaps the most recognized green building standard in the country. Specific rating systems include New Construction, Existing Buildings, Neighborhood Development, Homes, and others.

### *Prescriptive-based:*

Prescriptive-based requirements, as referenced in this document, are components of a building code that are specific to particular building systems and improvements. For example, insulation R-value requirements or boiler efficiency requirements that can help achieve greater efficiency.



# Green Building Development Strategies for the Town of Bethlehem, NY April 2013

## *Performance-based:*

Performance-based requirements, as referenced in this document, are based on a target efficiency level, such as achieving 20% beyond ASHRAE 90.1 -2007 levels, or achieving a HERS rating of 70, which can be achieved through a variety of improvements, as opposed to requiring specific ones as in the prescriptive-based approach.

## Discussion of Energy Efficiency and Green Building Standards

There are a few key decisions the Town has to make with regard to adopting a green building development strategy. The first decision will be whether it wants to focus strictly on energy efficiency or more comprehensive green building standards. While these terms are sometimes used interchangeably, there are some important differences. If the Town wants to focus primarily on reducing energy use and associated greenhouse gas emissions within the community, the strategy should focus on energy efficiency and renewable energy. However, if other considerations such as water conservation, stormwater management, indoor air quality, sustainable materials, and waste reduction are also priorities for the Town, it may want to consider adopting a strategy that calls for broader green building requirements, such as LEED.

The key benefit of a focus on energy efficiency is that it can be widely adopted across a range of building types and the cost and emissions benefits are generally more apparent more quickly than some other green building benefits. It is also easy to adopt a performance-based target for an energy efficiency strategy as opposed to having numerous components with which developers must comply.

The benefit of more comprehensive green building standards, however, are that the Town would be addressing sustainability considerations beyond just energy use, improving occupant well-being, conserving natural resources such as water and raw materials, and it may be easier to include specific requirements for renewable energy. It is also important to note that green buildings are generally also energy efficient buildings. However, the level of energy efficiency can vary widely among green buildings that have achieved their green building status through a variety of mandatory and optional elements.

Whichever approach is selected, it is recommended that the Town determine what level of energy efficiency it would like to see achieved among residential and commercial buildings and adopt standards for achieving that level. Standards adopted could combine and customize elements of existing green building and energy standards in order to meet Bethlehem's top priorities. It is important to note that it is not necessary to adopt a strategy that strictly adheres to an existing standard or rating system, such as LEED or Energy Star. The Town can suggest performance metrics and allow developers to decide which approach or system is most appropriate for their project.

The Town will also need to determine whether it wants to focus its green development strategy on residential construction, commercial, or both. It may choose to begin with one sector and then address



## Green Building Development Strategies for the Town of Bethlehem, NY April 2013

another at some point in the future. The City of Dallas offers a helpful example of how it addressed all of these considerations through a two-phased green building program for both commercial and residential development that combined performance-based energy requirements with other green building standards as well as the third-party LEED system.

**Figure 1: City of Dallas Green Building Program<sup>1</sup>**

**Phase I (adopted October 1, 2009):**

Implement energy efficiency and water conservation requirements for all residential and commercial developments. Specific objectives include:

- Achieve a 7% reduction in greenhouse gas emissions from 1990 levels by 2012
- Require that all new homes are built 15% more efficient than code and meet 4 of 6 water efficiency strategies
- Commercial buildings less than 50,000 square feet must be 15% more efficient than code, while those greater than 50,000 square feet must meet 85% of LEED requirements

**Phase II (beginning October 1, 2011):**

Expand initiatives for new buildings into a comprehensive green building standard requirement. Specific objectives include:

- All commercial buildings must be LEED certifiable, with minimum of three Energy and Atmosphere points (17.5% better than code).
- All new homes must meet LEED for Homes or the Green Built North Texas Standard

The Green Building Task Force detailed the steps needed to achieve the goals of increased efficiency as a way to measure success. In April 2008, the city council approved an ordinance adopting the goals and subsequent green building program for all new homes and commercial buildings constructed in the city. Phase I of the Green Building Ordinance<sup>3</sup> went into effect on October 1, 2009; with Amendment 27759<sup>4</sup> (effective December 7, 2009); Phase II remains scheduled for October 2011.

<sup>1</sup> U.S. Department of Energy, Building Technologies Program, "Going Beyond Code," <http://www.energycodes.gov/sites/default/files/documents/GoingBeyondCode.pdf>



## Green Building Development Strategies for the Town of Bethlehem, NY April 2013

### Option 1: Adopt a local energy efficiency building code more stringent than the current ECCNYS.

The Town of Bethlehem's Building Department is responsible for enforcement of the Energy Conservation Construction Code of New York State (ECCNYS). To verify compliance with the ECCNYS, the Building Department reviews completed REScheck (for residential buildings) and COMcheck (for commercial buildings) forms from builders, designers, and contractors for all building projects.

Local governments are permitted to adopt their own local energy code requirements so long as the requirements are no less stringent than those of the ECCNYS 2010, which is modeled on the International Energy Conservation Code (IECC) 2009. While the ECCNYS has been an important step forward with regard to improving energy efficiency in buildings throughout the state, building designers and contractors have the knowledge, tools, and resources to meet more progressive standards for energy efficiency. For that reason, **the first option for the Town to consider for furthering green development within Bethlehem is to adopt a more stringent local energy code that would ensure that ALL new buildings are performing more efficiently than those built to just the base code, thus reducing energy costs for building owners and reducing Bethlehem's demand for fossil fuels and its generation of greenhouse gas emissions.**

The ECCNYS 2010 is applicable to both commercial and residential building construction. The code contains both prescriptive and performance requirements for achieving energy efficiency in buildings. Commercial buildings are designed according to Chapter 5 of the code, with an alternative compliance option of designing according to ASHRAE 90.1 -2007.<sup>2</sup> A more stringent local energy efficient building code would require efficiency levels above those of ASHRAE 90.1-2007.

#### *Case Study: Massachusetts Stretch Energy Code*

In considering adoption of a building code that is more stringent than the efficiency requirements of the IECC 2009, adoption of the "stretch code" by Massachusetts communities offers a helpful model for the Town of Bethlehem. Similar to New York, the base energy code in Massachusetts is the IECC 2009. The stretch code is an optional appendix to that code that can be adopted at the local level. While the ECCNYS does not provide such an appendix for local adoption, the Town could still consider modifying its local code in a manner consistent with that of the stretch code.

The stretch code provides a path for both commercial and residential buildings to achieve approximately 20 percent greater energy efficiency than the base code. New residential construction requires a performance-based compliance path based on the Home Energy Rating System (HERS) administered by the national Residential Energy Services Network (RESNET). Homes must achieve a HERS score of 65 or 70, depending on size, and pass the Energy Star Thermal Bypass Checklist.

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<sup>2</sup> New York State, Department of State, Division of Code Enforcement and Administration:  
[http://www.dos.ny.gov/dcea/energycode\\_code.html](http://www.dos.ny.gov/dcea/energycode_code.html)



## Green Building Development Strategies for the Town of Bethlehem, NY April 2013

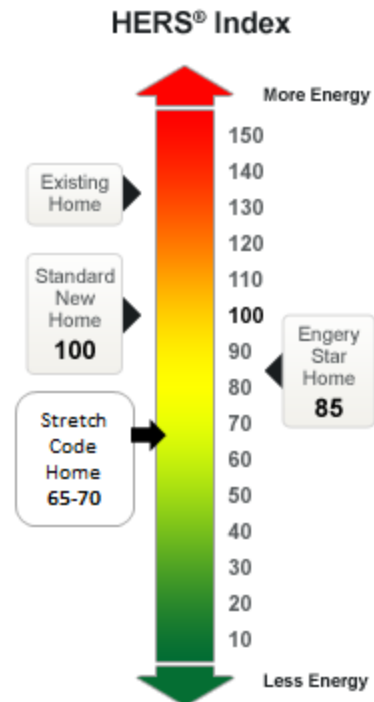
Enforcement of the stretch code is similar to that of the base code. The developer must have an independent HERS rater produce a HERS report and complete a Thermal Bypass Checklist. This documentation is submitted to the local building inspector for inclusion in the plan and site review. In this way the additional requirements for implementation and enforcement of the stretch code are on the developer and not the building inspector. The HERS score requirement is a similar process to meeting the Energy Star for Homes program, meaning that **the Town could consider a straight adoption of the Energy Star for Homes standard as its residential energy code.**

New commercial development must meet the stretch code requirements through either a prescriptive or performance path. The performance based approach requires the building to be at least 20 percent more efficient than efficiency achieved according to ASHRAE 90.1 2007. The prescriptive approach is estimated to achieve similar energy efficiency levels. The developer must provide documentation of compliance through an energy model report produced using energy modeling software.

The Massachusetts Department of Energy Resources estimates that residential construction costs are increased by approximately \$3,000 for a typical single family home and commercial costs go up by one to three percent by meeting the stretch code. Energy cost savings and rebates available for these buildings result in a positive cash flow for homeowners within the first year and a payback of one to two years for commercial buildings.<sup>3</sup>

### *Application to Bethlehem*

While Bethlehem would not necessarily need to adopt the exact requirements of the Massachusetts stretch code, the Town could easily borrow the standards and requirements from the code for creation of a local energy efficiency code. The Town could choose to adopt requirements for residential and commercial construction, or focus on one sector at this time. It would be simple to adopt either the performance-based compliance path for residential or commercial as they are based on widely accepted energy standards or to simply supplement the ECCNYS 2010 with some specific additional prescriptive requirements as has been done in New York City (*see link provided below*). The Town will have to get any amended local building code approved by the State.



<sup>3</sup> MA Department of Energy Resources, "Q&A for MA Stretch Energy Code Appendix 780CMR 115.AA." <http://www.mass.gov/eea/docs/doer/green-communities/grant-program/stretch-code-qa-feb10-2011.pdf>



## Green Building Development Strategies for the Town of Bethlehem, NY April 2013

### *Potential Challenges for this Option*

The greatest challenge that Massachusetts faced in local adoption of this stretch code and that other states and local communities have faced in adopting more stringent base energy codes has been widespread misinformation about higher costs associated with more energy efficient construction. This misinformation was mitigated in Massachusetts through training sessions and workshops with key stakeholders, including developers, building officials, and the public, on the costs and benefits associated with building to the stretch code. The result has been adoption by 123 communities (approximately 35% of all local governments) in Massachusetts as of January 2013.<sup>4</sup>

Another challenge would likely be the compliance review on the part of the Town's Building Inspectors. However, there are a couple of ways in which this challenge can be addressed. First of all, if the Town adopted a third-party verified standard, such as Energy Star for Homes for the residential sector, the burden of verifying compliance is on a third-party, in this case a HERS rater. The only challenge in that case may be the number of available HERS raters in the region, though evidence suggests that when demand for HERS raters rises, the number of certified HERS raters quickly increases. Links to available HERS raters in the region are provided below.

Another potential solution could be the use of REScheck and COMcheck reports to document compliance. Because the Town is already familiar with these energy modeling reports, adapting them to show compliance with a more stringent energy code would allow for a more streamlined review process transition for the Town's inspectors. While further investigation will be necessary to determine exactly how to adjust the use of the REScheck and COMcheck tools for verifying compliance with a revised local code, it appears there may be options for doing so, such as verifying via the reports that a building is performing a certain percentage above code. If unable to adapt the REScheck and COMcheck process to their needs, additional training for inspectors may be needed on the specific requirements of the code, what to look for during inspections to verify compliance, and how to read and interpret alternative energy modeling reports. This may present a challenge due to the Town's limited training budget.

### *Benefits of this Option for Bethlehem*

Adoption of a more stringent energy code in the Town of Bethlehem will have a number of benefits. It would be a significant action for addressing Pledge Element 6 of the Climate Smart Communities Pledge: *Promote Climate Protection Through Community Land Use Tools*. It would save local residents and business owners money, reduce fossil fuel consumption and greenhouse gas emissions, and further promote competition and economic development in the building design and construction sector. Analyses performed in recent years have indicated that energy efficient and green buildings have a greater market value, lower operating costs, and increased occupancy rates compared to conventional buildings. One study indicates a three to five percent rental premium and a 28 to 29 percent sale price

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<sup>4</sup> Massachusetts Department of Energy Resources. <http://www.mass.gov/eea/docs/doer/green-communities/grant-program/stretch-code-towns-adoption-by-community-map-and-list.pdf>



## Green Building Development Strategies for the Town of Bethlehem, NY April 2013

premium for LEED and Energy Star buildings.<sup>5</sup> Education about these benefits will be instrumental to the implementation of any green building strategy adopted in Bethlehem.

Additionally, a priority strategy identified in the Capital Region Sustainability Plan completed through the Cleaner, Greener Communities program, is to promote local adoption of more stringent energy efficient building codes. As more communities throughout the Capital Region and the state look to adopt such codes, the Town of Bethlehem could be a leader and serve as a model for other communities, and possibly become eligible for Cleaner, Greener Communities implementation funding in the coming year.

### *Additional Resources*

Massachusetts Executive Office of Energy and Environmental Affairs Stretch Code Resources:

<http://www.mass.gov/eea/energy-utilities-clean-tech/green-communities/gc-grant-program/criterion-5.html>

780 CMR: Massachusetts Amendments to the International Building Code 2009 – Appendix AA:

<http://www.mass.gov/eopss/docs/dps/8th-edition/115-appendices.pdf>

Building Energy Codes Program, New York: <http://www.energycodes.gov/adoption/states/new-york>

New York City Energy Conservation Code: <http://www.nyc.gov/html/gbee/html/codes/enacted.shtml>

U.S. Department of Energy, Building Technologies Program, “Going *Beyond Code*”:

<http://www.energycodes.gov/sites/default/files/documents/GoingBeyondCode.pdf>

HERS Rater Lists:

- NYSERDA’s list: <http://www.nyserda.ny.gov/Contractors/Find-a-Contractor/Home-Energy-Rating-System-Provider.aspx>
- RESNET list: [http://www.resnet.us/directory/search/searchtype/auditor/zip/12054/trade\\_id/89/slug/home-energy-raters-hers-raters/page/1](http://www.resnet.us/directory/search/searchtype/auditor/zip/12054/trade_id/89/slug/home-energy-raters-hers-raters/page/1)
- NEHERS list: <http://www.nehers.org/members/raters.aspx>

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<sup>5</sup> U.S. Department of Energy, Building Technologies Program, “Going *Beyond Code*,” <http://www.energycodes.gov/sites/default/files/documents/GoingBeyondCode.pdf>





# Green Building Development Strategies for the Town of Bethlehem, NY April 2013

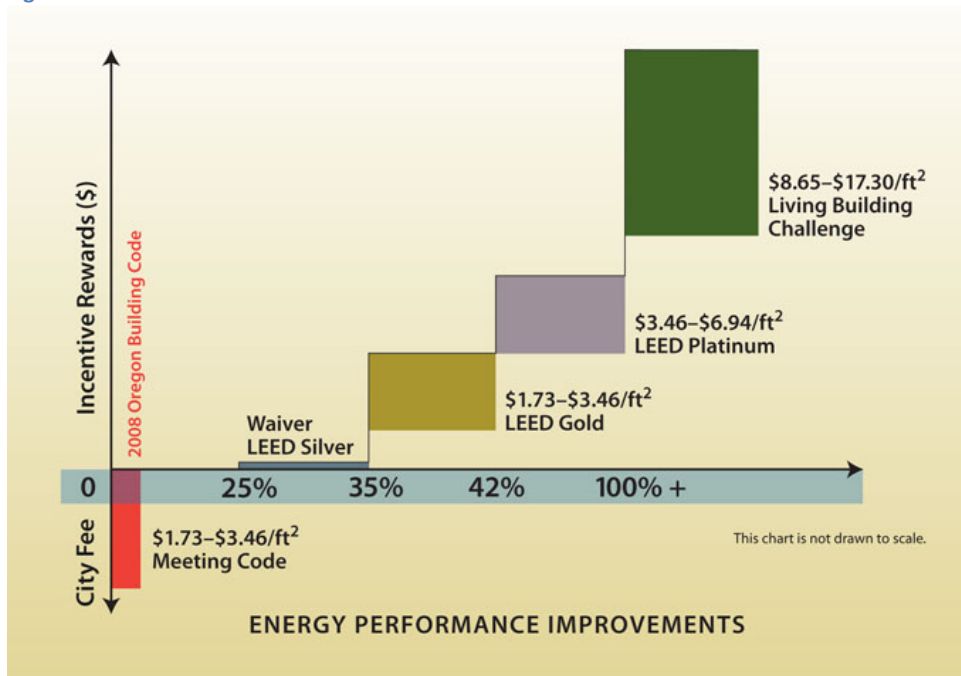
## Option 2: Establish a sliding scale, phased “Feebate” program for new developments.

A “feebate” system is a relatively new mechanism for incentivizing green building development. The basic premise of the system is that developers that build to the minimum code pay standard building fees. Those fees are put into a fund that can then be used to provide rebates to developers building to high energy efficiency or green standards. Those achieving a lower level of green standards would simply have their fees waived. A benefit of this program is that there is a great deal of flexibility in how it can be structured and it creates a unique alternative to requiring developers meet a specific standard. Portland, Oregon has recently proposed a feebate structure that clearly demonstrates how the program can work.

### Portland, OR Feebate

Portland has introduced a feebate system for new commercial construction over 20,000 square feet. Developers that meet Oregon state building code are assessed a standard fee of up to \$3.46/sq ft. If the developer meets US Green Building Council (USGBC) LEED Silver standards, that fee is waived, and for buildings achieving higher than LEED Silver standards, tiered rebates are given.<sup>6</sup> The following graphic provides a good overview of Portland’s feebate structure.

Figure 2: Portland OR Feebate Structure for Commercial Construction



<sup>6</sup> Environmental Building News, 2009. “Portland to Introduce Green Building Feebates.”

<http://www.buildinggreen.com/auth/article.cfm/2009/1/29/Portland-to-Introduce-Green-Building-Feebates/>

<sup>7</sup> *Ibid.*



## Green Building Development Strategies for the Town of Bethlehem, NY April 2013

Multifamily projects are subject to a similar structure with different fees, depending on the building size. To address single-family home development, the City has set targets for the number of homes built to green standards (such as LEED for Homes), and if targets are not met, will then introduce a similar feebate structure for single-family homes as well. In this way, Portland has phased their feebate program in order to target those buildings with the greatest impact first. It will also allow them to collect more money into the fund before offering financial incentives to homebuilders.

### *Arlington County, VA*

Arlington County, VA established a program in 2003 that requires developers to achieve LEED certification or to contribute to its Green Building Fund at a rate of \$0.03 per square foot. The County later amended that rate to \$0.045 per square foot in 2009. If a building later achieves LEED certification, it will then be rebated the fees paid.<sup>8</sup> As of 2009, the fund had a balance which the County used to support green building outreach and education programs that could further support developers in meeting green building requirements.

### *Application to Bethlehem*

Bethlehem currently charges fees for building permits, site plan application review, site plan approval, inspection, and Department of Public Works fees, such as sewer and water connection fees or backflow prevention fees as applicable. In an example provided by the Town, a commercial building of 48,000 square feet and a value of \$2.3 million<sup>9</sup> was assessed fees totaling \$47,130. This is approximately 2 percent of the project cost. Assuming a cost premium for building to green standards of one to three percent, a waiving of building fees could be enough incentive to build green since the permit fees are close to the cost to build green. This argument can be taken further even if accounting for long-term savings associated with green buildings and the increased property value.

The upfront cost to developers will be a determining factor in the uptake of such a program. Therefore, **the Town will need to structure its building and review fees schedule to ensure that fees assessed are tightly aligned with increased development costs.** Similarly, any higher tiers of providing rebates beyond a simple waiver would need to be tightly linked to the incremental costs of meeting higher green standards. This fee structure and feebate system will need to be set up so that fees flow into a fund that can be drawn on for provision of rebates. In addition, if the feebate is for energy efficiency alone, the fees waived or rebated should only be those associated with the building itself. However, if the feebate is for more comprehensive green standards, it will make sense to include fees associated with the site, water, sewer, etc.

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<sup>8</sup> Pippin, Ann Marie. 2009. "Survey of Local Government Green Building Incentive Programs for Private Development." [http://law.uga.edu/landuseclinic/research/leed\\_pippin.pdf](http://law.uga.edu/landuseclinic/research/leed_pippin.pdf)

<sup>9</sup> A local newspaper stated a much higher project cost for the building, which would impact the comparative analysis between permit/review fees and the cost premium to build green.



## Green Building Development Strategies for the Town of Bethlehem, NY April 2013

The Town could implement a feebate structure over time to reduce the overall impact on developers, such that fees go up from one year to the next, which also assumes that the incremental cost for building green goes down over time. While the examples provided above required LEED green building standards, this structure could easily be applied to energy efficiency requirements alone or some combination of energy and green building requirements.

### *Potential Challenges for this Option*

Similar to the first option, the implementation of a feebate structure would require the Town's Building and Engineering Divisions to be able to ensure compliance with whatever energy efficiency or green building standards required. While the onus is on the developer to provide documentation of compliance, the Planning Board, Development Planning Committee, Engineering Division, and Building Division would need to have some knowledge of energy efficiency and/or green building standards to best understand the documentation provided and to ensure proper compliance. Some staff already have some knowledge of green infrastructure practices, but additional education may be required of staff depending on the type of green standards adopted. As with any option, funding for staff training could be a challenge in the near future, so the Town may need to seek external funding sources to support this effort. As previously mentioned, the feebate structure would need to be established in such a way that developers would not shy away from proposing projects within Bethlehem. A phased structure could help overcome this particular challenge as well as ensuring that the fees/rebates provide a fair and reasonable incentive.

The Town has inquired as to whether this particular option would be permissible within the State of New York. While there are a couple of green building requirement programs in New York, we are not aware of any program in the state established as a feebate structure as described here. Two examples of green building requirements are provided below.<sup>10</sup>

- Babylon, NY, Adopted in 2006:  
Municipal Code. Chapter 89, Building Construction. Article VIII. Green Building Certification. Applies to all new construction of non-residential and multi-family buildings 4,000 SF or larger. Applicants must submit LEED checklist to obtain a building permit and pay green building fee of \$0.03/SF, up to \$15,000; the fee is refunded if LEED-certified status is achieved.  
<http://ecode360.com/6806036>
- Huntington, NY, Adopted 2010:  
Code of Ordinances. Chapter 197, Planning, Design and Development. Applies to all new commercial construction of 4,000 SF or more, except for Town sponsored projects. Applicants must submit LEED checklist and pay fee of \$1/SF, up to \$200,000, into Green Building Trust; fee

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<sup>10</sup> American Planning Association. Feb 2011, "Green Building Policies and Programs,"  
<http://www.planning.org/pas/infopackets/subscribers/pdf/EIP-13.pdf>



## Green Building Development Strategies for the Town of Bethlehem, NY April 2013

minus \$0.02/SF (to pay for program administration) is refunded when LEED certification is received. <http://ecode360.com/12185304>

VHB is not currently aware of any cases brought against a local government in New York or elsewhere in the country. However, VHB is not able to provide legal advice on this matter and highly encourages that Town to engage its own legal counsel to determine if there is potential for legal challenges associated with local adoption of a feebate structure.

### *Benefits of this Option for Bethlehem*

In addition to the benefits to Bethlehem of greener buildings as already articulated under Option 1, this particular approach has the benefit of flexibility in how it can be adopted and structured. The fee structure, including applicable building types and timing or phasing of implementation can all be adapted to meet the specific needs of Bethlehem. Another benefit is that the feebate system could be self-sustaining. In other words, fees assessed go into a fund that can then be used to provide rebates and any excess funds can be used to support any necessary education and training to better meet the needs of the program.

### *Additional Resources*

Seattle, Washington developed a scorecard analyzing the potential for implementing a feebate program: [http://www.seattle.gov/environment/documents/GBTF\\_Feebate\\_Scorecard.pdf](http://www.seattle.gov/environment/documents/GBTF_Feebate_Scorecard.pdf)

Portland, Oregon Feebate Case Study:

[http://www.seattle.gov/environment/documents/GBTF\\_%20Portland\\_Feebate\\_Case\\_Study.pdf](http://www.seattle.gov/environment/documents/GBTF_%20Portland_Feebate_Case_Study.pdf)

Article on Portland Feebate from Environmental Building News:

<http://www.buildinggreen.com/auth/article.cfm/2009/1/29/Portland-to-Introduce-Green-Building-Feebates/>



## Green Building Development Strategies for the Town of Bethlehem, NY April 2013

### Option 3: Attach green building requirements to incentive programs within development approvals

The third option that the Town wants to consider for promotion of green development within Bethlehem is attaching green building or energy efficiency requirements to incentives offered by the Town. The Town could attach green building requirements to the incentives sought by the developer. Incentive examples include density increases, lowered finance rates or enhanced tax abatements. In this way, the Town is leveraging the developers' desire for incentives in order to achieve greener development within Bethlehem. There are a few ways this could be implemented.

#### *Conservation Subdivisions*

From 2011 to 2012, Bethlehem worked with VHB to conduct an Energy and Land Use Review to determine potential options for further promoting energy conservation in land use policies. One recommendation that came out of that project was to expand the open space for conservation subdivision incentives to include energy efficiency and/or green building requirements. Through the existing policy, applicants can receive a density increase in exchange for the preservation of a greater amount of open space lands. For example, the Zoning Law allows for the permanent preservation of not less than 40% of the gross land area of a proposed conservation subdivision, a fifteen percent increase to the maximum unity density for the zoning district may be approved (50% preservation achieves 20% density increase). The Town could expand its definition of "conservation" to include conservation of energy and/or natural resources used in the operation of buildings through energy efficient and green building design. This would require the addition of a new subsection to the Town Code.

Currently, per Zoning Law §128.51, an applicant can apply for an increase in density in exchange for preservation of additional open space. A third subsection could include an option for a density increase in exchange for the development achieving a specific green building or energy efficient standard.

#### *Planned Development Districts*

Bethlehem's Planned Development District (PDD) found in Zoning Law §128.40 is a tool that allows for creative mixed-use developments, combining office, residential and neighborhood services. A PDD is a "floating zone" because unlike other zones clearly designated on the Zoning Map, PDDs can be developed throughout Town, in any zone. A PDD must receive review and recommendation from the Planning Board, but also requires Town Board approval since a rezone is required. Essentially, a PDD allows a greater development density to that permitted by the parcel's current zoning. An option the Town may consider is requiring all PDD projects to achieve specific green building or energy efficiency standards in exchange for receiving the PDD rezone.

Subsection B. General Regulations of the PDD section could be revised to include or reference the specific green building or energy efficient standard requirement. Similarly, the section's criteria for



## Green Building Development Strategies for the Town of Bethlehem, NY April 2013

rezoning to a planned development district could be amended to include meeting a community need related to energy efficiency or green building.

### *IDA Incentives*

The Town could also attach specific green building or energy efficiency requirements to the application for incentives through the Bethlehem Industrial Development Agency (BIDA). Currently BIDA offers tax abatements, tax exemptions, and bonds for qualifying projects. For example, a project can apply for enhanced tax abatement if meeting the following criteria:

1. Extraordinary new job creation or capital investment
2. Net new business investment in the Capital Region
3. Reuse or redevelopment of abandoned or underutilized real estate
4. Consistency with the Town's comprehensive plan recommendations
5. Market penetration; potential for catalytic effect for subsequent projects
6. Consistency with regional target industries
7. Business development that promotes economic diversification<sup>11</sup>

Especially given criteria 4 listed here- "consistency with the Town's comprehensive plan recommendations," there is an opportunity to include requirements for meeting energy efficiency or green building standards in order to qualify for financing or tax incentives. This could be done by adding standards directly to this list of criteria. Another option, that may alleviate developer concerns, would be to make a separate category for more enhanced incentives if meeting green building or energy efficiency standards. For example, a project meeting standard IDA eligibility criteria could enter into a standard PILOT (payment in lieu of taxes) agreement, but in order to qualify for the enhanced PILOT program, would be required to meet additional green building or energy efficiency standards.

### *Potential Challenges for this Option*

An initial challenge for this option is that sometimes a developer will buy property that is then subdivided and the green/energy efficiency requirements for each lot will need to be passed on to the buyer for that lot. In other words, it would need to be a requirement as a condition of approval of the development that formal notification be provided to the buyer that any building on that lot must meet certain energy efficiency or green building standards. This can be done through inclusion of language in the final plat approval. For example, if high energy efficiency standards are to be met, the final approval could include language such as, "The Planning Board will require that a condition be placed in the Contract for Purchase and Sale of Real Estate, indicating that the lot will require the building perform 20% more efficiently than required by the ECCNYS."

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<sup>11</sup> Bethlehem Industrial Development Agency: <http://bethlehemida.com/index.php/site/IDA-Assistance-Incentives/Real-Property>



## Green Building Development Strategies for the Town of Bethlehem, NY April 2013

While there are some examples of IDA programs that promote green/clean business development, tying green building requirements directly to IDA incentives would be a new approach in New York.<sup>12</sup> It may be beneficial to the Town to reach out to the Albany County IDA to discuss opportunities for collaboration. Albany County, also a Climate Smart Community, is currently investigating options for inclusion of green initiatives into their Economic Development Plan. Adoption of this approach could be challenging with the IDA board and, as with the other options outlined, educating both the board and the business community will be essential.

### *Benefits of this Option for Bethlehem*

It is likely that the challenges described above could reasonably be overcome. Businesses are increasingly engaged in green development and this strategy operates within a framework of incentivizing rather than requiring something. Bethlehem could prove itself to be an innovative leader in New York as the first to adopt such an approach. The other benefit of this is the ability to use an existing policy instrument as opposed to adopting something completely new.

### **Next Steps**

The options outlined in this document are only three of several possible options for promoting green development and energy efficiency in Bethlehem. Variations of these options or combinations of particular elements of these options should be considered as the Town moves to adopt and implement a strategy.

Next steps for the Town will be to evaluate the information provided in this document and in additional resources provided, to determine which elements are likely to work best for Bethlehem. An essential next step will be for the Town to determine its priorities for energy efficiency and/or green building and to establish what level efficiency or what elements of green development it wants to achieve community wide. From there, the Town will need to develop language for any policy adoption, building code revision, or zoning change.

The Town may want to consider surveying or convening key stakeholders in Bethlehem to gauge what types of requirements and/or incentives would motivate developers to design for energy efficiency and sustainability. If doing so, cost/benefit and other information should be provided to assist stakeholders in providing a well-informed position. Additional technical assistance will be available to the Town for Year Two of the Climate Smart Communities Regional Coordinator program, which it may want to leverage for continued support in adopting and implementing a green development strategy for Bethlehem.

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<sup>12</sup> According to a document produced by the Office of the New York State Comptroller, IDA's are given "a substantial degree of discretion over how PILOT programs are negotiated, and the criteria used to determine PILOTs differs among IDAs." Office of the New York State Comptroller, "Industrial Development Agencies in New York State: Background, Issues, and Recommendations." May 2006, p. 8.