**MEMORANDUM**

**TO:** Montgomery County Planning Board

**VIA:** Jeff Zyontz, Chief, County-Wide Planning Division

**FROM:** Mark Pfefferle, Planner Coordinator MP

**DATE:** January 9, 2004

**SUBJECT:** **Private Sector Incentives for Leadership in Energy and Environmental Design (LEED)**

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## I. RECOMMENDATION

Staff recommends Planning Board forward to the Montgomery County Council that the
1) Council pursue density/FAR increases for developers that construct Leadership in Energy and Environmental Design (LEED) certified green buildings.
2) Create a recognition program for LEEDs building.
3) Create a pilot program for "Green Taping" subdivisions that will seek LEEDs.

## II. DISCUSSION

On November 13, 2003, the Montgomery County Council's Transportation and Environment (T&E) Committee received a briefing on and discussed green buildings. Representatives from the State of Maryland's Green Building Program and the Montgomery County Department of Public Works made presentations explaining what green buildings are and the benefits of green buildings. Council members were impressed with the green buildings and wondered why so few private sector developments utilize green building technology when long-term financial benefits are known and the upfront capital costs are comparable to conventional buildings. Councilwoman Nancy Floreen expressed a desire to learn what could be done to encourage more green buildings in Montgomery County. Currently no green building program exists in Montgomery County.

At the presentation, Maryland-National Capital Park and Planning (M-NCPPC) staff indicated to the T&E committee members that M-NCPPC was identifying potential incentives for private sector adoption of green building technologies in Montgomery County. Staff has now completed research on existing green building incentives, discussed other incentives and disincentives internally, and is now looking for guidance from Planning Board members on recommendations to make to the T&E committee.

## III. BACKGROUND

In Montgomery County, there are six United States Green Building Council (USGBC) LEED certified green buildings. Two of those buildings are operated by the federal government, one by the State University system, one by a not-for-profit housing group, and two by the private sector. Green buildings are increasingly common and are found in all types for environments from Times Square in New York City to Dundee, Oregon. As green technologies become increasingly competitive, the cost premium to build green has decreased. Any additional upfront costs are quickly erased by the long-term operation and maintenance cost savings, increases in worker productivity, and ease in building conversion. No matter the increase in popularity, there still remains resistance to build green buildings. For additional information on green buildings, please see Attachment A.

"Green buildings", "sustainable build", and "high performance buildings" are all terms that involve energy-efficient and environmentally friendly development projects. The term "green buildings" is primarily associated with LEEDs certification. Buildings can still be environmentally friendly and sustainable and not be LEED certified. However, LEEDs provides a metric for which all buildings can be measured and compared. The LEEDs approach creates different level of performance based upon a point system. The lowest level is a "certified " building. There are also silver, gold, and platinum levels.

If the research indicates that green buildings are better for the environment, increase worker productivity, are comparable in short term costs and financial advantageous in the long term, why aren't all developments green? There are many reasons, but the biggest is probably lack of awareness of the opportunities. There remains a widespread lack of understanding about what green buildings are, the market for it, why it is beneficial, how to do it, and why it makes so much sense financially. To date, the majority of green buildings are constructed by governments, educational institutions, and not-for-profit organizations. Without incentives, the ability to attract new private sector investment is low. Obstacles to the adoption of green measures include:

- Confusion. Many developers, engineers, and building contractors are confused as to what green buildings entail, how to select high-environmental-performance products, and the total benefits that can result.

- Cost. The perception that green building measures cost more persists despite cost-effective examples. Initial capital costs may be higher but a life-cycle analysis shows total costs to be lower than conventional building techniques. If green buildings are perceived to be more expensive to construct, developers constructing in a speculative market may be unwilling to fund additional costs.

- Time. Green developments do take more time up front though this is necessary to develop a complete system.

- Examples. Too few green building demonstration projects are available to provide the industry with needed "how-to" information.

- Education. Too few architects, engineering firms, builders, equipment providers and manufacturers, and a work force are properly educated or trained in green building design and construction.

## IV. INCENTIVES

A number of state and local governments throughout the county have adopted various forms of incentives to attract private sector investments. The most popular private sector incentive is through tax credits. Many states, including Maryland, offer tax credits to the owners of green buildings. Other credits currently utilized by local governments include density bonuses, reduction in permitting fees, grants, technical expertise, awards, and recognition. Below is a more detailed description of incentives that could be used to encourage the greater use of green building technologies in Montgomery County.

### A. Incentives currently used outside of Montgomery County

#### Tax Incentives

The most popular private sector green building incentive is state business and personal income tax credits for owners or tenants of eligible buildings and tenant spaces. The state of New York implemented the nation's first tax incentive program for the design, construction, or rehabilitation of environmentally friendly buildings in January 1, 2001. Since its inception, the sate has awarded over $18 million dollars in business and personal income tax credits for the construction of green buildings.

On November 3, 2003, the state of Maryland announced the Green Building Tax Credit, which provides a financial incentive for commercial developers that construct or retrofit commercial buildings to make them resource and energy efficient. Twenty-five million dollars are available in this program through 2011. The tax credit is valued at 6 percent to 8 percent of the design and construction cost of a building that achieves LEED Silver or better rating, and shall be applied to the income tax. Qualified buildings must be at least 20,000 square feet and located in a brownfields site or in a Priority Funding Area. (See Attachment B for more information on the State's tax credit program).

Income tax incentives are currently available to private developers in Montgomery County. Staff does not encourage the Planning Board to recommend additional income tax credits at the County level.

#### Density/FAR Increases

Arlington County, Virginia is the only government jurisdiction in the country offering a bonus density program. The program was initially implemented in April 2000 and revised in December 2003. Although many developers expressed interest in the pilot program, only one applied and received a bonus density. The program was expanded in 2003 to include all types of development, not just commercial office projects. The bonus amount is based on the level of LEED certification. The program allows the Arlington County Board to consider a modification of use regulations for additional density

between 0.15 and 0.35 FAR and/or additional height up to 3 stories, depending on the LEED level achieved. Achieving a specific LEED level does not guarantee a density bonus. To achieve the bonus density the applicant must identify the request at the time to site plan submission. If the County Manager supports the project the Arlington County Board, as part of the conditions of approval of the plan, requires the green components identified at the time of submission, be installed in the building. The County uses LEED certified inspectors or architects hired by the developer to review permit drawings and the building construction process. Buildings permits are only issued if the County Board approved green components are included in plan drawings. The LEED application is submitted to the USGBC whine the building construction is complete or substantially complete, depending on the credits selected. If at any time the developer is unable to include the green building components identified in the conditions of approval, the developer must replace those components with those ones acceptable to USGBC and LEED. During construction, the LEED certified architect or inspector must submit regular reports ensuring compliance with LEED standards. If the developer fails to include the green building components, the County will pursue enforcement actions. An occupancy certificate is issued after USGBC certifies the site at the appropriate LEED level. A more detailed description of Arlington County's program can be found in Attachment C.

A bonus density approach has merit. It can provide additional development in desirable locations and result in sustainable developments. (A similar approach is already used in Montgomery County in the CBD zones where optional method projects receive bonus density in exchange for public amenities). M-NCPPC and the Department of Permitting Services (DPS) would have to work closely together in any bonus density program. It would also become the responsibility of DPS to ensure that the building conforms to LEEDs and that the green technologies and design are included in the construction. (If this is pursued further, staff will work with DPS, to develop an acceptable system for administration).

The detriment of density bonuses is the increased demands on infrastructure are being imposed on a neighborhood in exchange for a more sustainable building. Because the cost premiums for green buildings are relatively small, the bonus density used as an incentive will likewise be small. In addition it will be unlikely that all new development will take advantage of the incentive.

**Staff recommends the Planning Board encourage the County Council pursue a bonus density strategy to encourage new green building investments.**

**Fee Reductions**

Some local governments have instituted fee reductions to encourage the use of green technologies. Local governments offering fee reductions include Scottsdale, Arizona; Santa Barbara, California; and Gaithersburg, Maryland. The fee reductions are typically based on the LEED level achieved.

In order to be a viable incentive, the fee reduction amount would have to offset the perceived additional cost to achieve a certain LEED level. If for example, Montgomery County were to offer this incentive the fee reduction would have to be sufficient to cover

the additional cost to achieve LEED. In Montgomery County the maximum building permit fee is $126,500. If a 50 percent reduction were awarded to a developer paying the maximum building permit fee, the cost saving would be $63,250. This amount may be insufficient to convince the developer that the additional premium to build a green building could be captured by a fee reduction. If additional fees were reduced or waived, it may become attractive for developers to pursue green technology. However, since many county agencies are fee based operations other fees would need to be increased to offset the loss in operating revenue.

Fee reductions could be used to offset costs of additional costs, such as hiring a LEED certified architect. If combined with other incentives, fee reductions may make green technology more attractive to the development community.

**Education/Technical Assistance**

Numerous local governments offer professional expertise to assist developers in optimizing green technologies into new projects. The expertise is typical offered as a free service to the development community. Seattle, Washington; Scottsdale, Arizona; and Santa Barbara, California are just a few of the local jurisdictions offering this service. The service educates the development community through individual meetings with project officials and assists in identifying and maximizing energy efficiency and identifying state incentives such as elimination of sales taxes for certain products.

The Montgomery County Department of Permitting Service currently provides voluntary design review conferences to discuss preliminary/schematic building design drawings prior to preparation of final construction documents (working drawings, specifications, etc.).

Certainly, as the development community finds both tax incentives and density bonus they may educate themselves. If the County government is to develop an education program, a revenue stream would have to be identified for this purpose such as increased development fees. This is discussed therein.

**Grants**

A few local jurisdictions provide grants to developers that meet certain LEED certifications with their projects. Most grant programs at capped at $15,000 per development project. The grant amount is based on the LEED level achieved or sought. If the desired LEED level is not achieved the applicant is required to refund the grant.

The grant amount may not be sufficient to convince someone unsure of green technologies, but it may sufficient to assist not-for-profit organizations that want to pursue LEED certification but are unable to retain a LEED certified architect.

**Expedited Building Permit Reviews**

Some local jurisdictions are expediting the building permit stage when green building permit applications are submitted to the appropriate permitting agency. Expedited reviews can accelerate construction of new buildings and can become an advantage in a

tight market. Scottsdale, Arizona has an expedited building permit review process that approves building permits within 10 working days.

The Montgomery County Department of Permitting Services currently provides "Fast Track" building permit reviews for interior alterations in existing commercial buildings. With the leadership of DPS, a similar type of system could be developed for builders pursuing LEED certification. (In order for expedited reviews to become effective, a technical assistance program prior to the building permit submittal could help smooth the process.)

**Awards and Recognition**

Numerous local governments offer awards and recognition for developers that build green buildings. Scottsdale, Arizona acknowledges green buildings by placing large signs at the construction site to announce the construction of a green building. Other jurisdictions provide awards and public recognition that developers and builders use to promote their buildings. Awards and recognition have low costs associated with them. Benefits from this kind of advertisement and promotion would be slow in coming until community interest is built around green building design and implementation. As a starting point, construction signage could be added to all green buildings in Montgomery County.

Staff believes there is a benefit to an awards program for LEEDs compliant buildings.

## B. Other Incentives for Potential Use in Montgomery County

**Accelerated Subdivision Reviews**

An accelerated review process could be developed similar to M-NCPPC's "Green Tape" review process for affordable housing projects in Montgomery County. This could include modified application forms for subdivisions, project plans and site plans to identify green building projects; an expedited review process for applications; improved communications between the reviewing agencies to ensure quick reviews and fast passage of the development plans.

There are some risks to such a program, although these risks are controllable. A green taped subdivision may not end up as LEEDs certified at building permit. The number of Green Tape projects could cause delays.

Staff would support green tape for LEEDs building as a pilot program.

**Lower Local Taxes/Fees**

Other ideas suggested include a reduction in local taxes, such as property tax credit or a reduction in other taxes/fees. The property tax credit could be modeled after the Historic Preservation Tax Credit. This would allow only developments that qualify for the tax credit to submit an application for a credit against future property taxes. Other incentives could be a reduction in tax rates or fees that are assessed to developments such as the development impact tax or stormwater management utility fees, if the fees are applicable.

Similar to other financial incentives suggested earlier, the amount of tax relief would have to be sufficient to offset the perceived additional cost for using green technologies in the development before it becomes attractive to the private sector.

The energy tax already creates an incentive for conservation and a disincentive to buy energy. The more the tax is increased on a per unit bases for greater energy consumption, the greater the incentive for green buildings. (See disincentives below.)

### Tax Incentives for Tenants

Since the majority of the buildings in the County are not owned by the occupants, a potential incentive could be for the County to provide income tax incentives to the tenants of green buildings. With this incentive there is the potential that more firms would be in a position to force the market. If the demand for green office space increases, developers of buildings may become more inclined to construct green buildings. If there is a premium to build green and the cost in inevitably passed onto the renters, the tenants would then be able to recoup some of the additional rents through lower income taxes.

### Marketing

In order for developers to lease buildings built on speculation, there needs to be a way to distinguish the benefits to lessees. The County's Department of Economic Development may be ideally situated to assist in marketing green buildings to prospective tenants, or to identify the locations of green buildings for potential tenants.

### Agent Training

Sometimes the most difficult thing with a new technology is training people on what they are selling. The county could potentially institute a training program for leasing companies so that a thorough and consistent message it given to potential lessees.

## C. Disincentives for Potential Use in Montgomery County

### Energy Taxes

As a disincentive for not achieving LEED certification or greater, the county could impose an energy tax on new development. The tax would be applied during the building permit phase and during the subdivision process. Under this disincentive, the owners of such buildings would be penalized twice: first for not taking advantage of the greatest energy savings techniques available and second by paying a tax to the county. An inherent difficulty with this disincentive is that all commercial and residential buildings in Montgomery County are required to comply with either the Commercial or Residential Energy Code. If a building does comply with the Energy Codes, it still may not be sufficient to avoid the energy tax.

**Green Building Education Fees**

In order to provide public outreach and technical assistance to developers, many local government entities have hired qualified professionals to develop training and education programs, review green building permit applications and provide technical assistance when necessary. Most jurisdictions are using general revenues to fund such activities. However, Arlington County, Virginia has implemented a green building fee and policy of having site plan developers who do not commit to achieving a LEED rating contribute to a green building educations fund. The contribution is calculated at a rate of $0.03 per square foot. (This contribution calculation is based on the fees assessed by the USGBC for registration and evaluation of a formal LEED application.). Funds collected through this program provide education and outreach. If a project achieves LEED certification, the fee is refunded.

A program of this type could help fund a technical assistance and public awareness program in Montgomery County, if one where to be established. Instead of limiting the fee to only those that require site plans, the fee could be levied at the building permit stage and apply to all commercial, industrial and multi-family developments.

## V. GREEN BUILDING RESIDENTIAL PROGRAMS

Numerous local governments have developed programs to promote green buildings for residential developments including single-family detached housing units. The most successful residential green building program is the EarthCraft House program that is sponsored by the Greater Atlanta Home Builder's Association in cooperation with government and private industry. The program has become so successful that it is the model used for other jurisdictions.

EarthCraft House gives builders great flexibility. Builders can earn the necessary points by choosing the measures most practical for their homes. Similar to the LEEDs program for commercial developments the EarthCraft House provides a metric to which all houses are judged. (See Attachment D for a copy of the EarthCraft House checklist).

Builders submit a preliminary worksheet stating which EarthCraft House measures they anticipate for a specific house. EarthCraft House recognizes that material prices and availability can change during construction, so that builders can adjust the measures selected as long as they still earn the minimum required points. After construction is complete, builders submit a final worksheet that shows the selected measures. Measures included in the worksheet include: site design, energy efficiency, resource efficient building materials, waste management, in and outdoor water use, indoor air quality, homeowner education, and a commitment to building 80 percent the houses as EarthCraft houses. The house must have an inspection by the EarthCraft House program to verify the measures. Once the home is approved as an EarthCraft house, the homebuilder can use the EarthCraft house logo in print materials, promotions, and advertisements.

Other local jurisdictions have attempted to duplicate the success of the EarthCraft but they have not achieved the same level of success as in Atlanta. Locally, Arlington

County, Virginia recently modified the EarthCraft worksheet for Mid-Atlantic environments and will apply it to residential developments.

As previously mentioned, Montgomery County does not have a green building program. A similar type of program could be adopted in Montgomery County, but it would require cooperation and assistance from the MNCPPC, the Department of Permitting Services, and the homebuilder's association.

**TABLE 1.**
**POTENTIAL GREEN BUILDING INCENTIVES**

| Incentive | Responsible Agency | Necessary Action for Implementation | Benefits | Negatives |
|---|---|---|---|---|
| Tax Credit | State of Maryland | None – already functional | Reduced income taxes | Reduced income tax, but tax credit is capped. |
| Increased density/FAR | MNCPPC | Zoning change | Increased density, more density to offset perceived additional developer costs | May conflict with master plans. Additional agency reviews to ensure LEED occurs. Greater demands on existing infrastructure. |
| Reduced Fees<br>• Return of Subdivision Fees<br>• Building permit fees | MNCPPC<br><br>DPS | Fee schedule change<br><br>Fee schedule change | Less fees for developer | Less revenue for public agencies |
| Education/Technical Assistance | MNCPPC/DPS | Policy change and/or program development | Increased public awareness and additional resources | Additional funding or manpower |
| Grants | Montgomery County | Program development | Public funds made available to the private sector achieve LEEDs | Increased government outlays of financial resources |
| Expedited Building Permit Reviews | DPS | Policy Change | Reduction in the amount of time to begin ground-breaking | May slow approval of other building permits |
| Awards | MNCPPC/DPS | Public recognition | Potential marketing tool for developer/builder | |
| Accelerated Subdivision Review | MNCPPC and DPS, DPWT | Policy Change | Reduction in the amount of time to begin ground-breaking | May slow approval of other subdivision plans |
| Less Local Taxation | County Finance | Legislation | Reduces local taxes for developer/builder | Reduces County revenues |

**TABLE 2.**
**POTENTIAL GREEN BUILDING DISINCENTIVES**

| Incentive | Responsible Agency | Necessary Action for Implementation | Benefits | Negatives |
|---|---|---|---|---|
| Energy Tax | County Finance | Legislation | Increased County revenues | Developers/builders that comply with energy code may still have to be the energy tax |
| Green Building Education Fund | ? | Legislation | Funds collected from developers/builders not meeting LEED to be used for education purposes and technical assistance | Additional development cost |

## VII. LIST OF ATTACHMENTS