Are Green REITs Valued More?

Executive Summary. *The growing popularity of corporate social responsibility amongst firms has led to an increase in sustainable initiatives across all sectors. While there has been evidence of benefits to owners of green buildings, the impact at the firm level for such investments is not commonly known. The objective of this study is to provide evidence on the question of financial benefits from strategic initiatives aimed at increasing ownership of greener buildings. We use real estate investment trusts (REITs) as investors/owners of properties to test if management initiatives result in higher firm value. Using a proxy for green initiatives by REITs, we find evidence of positive impact on firm value as measured by Tobin's q. Further, our results show that green REITs have a higher return on assets than their less-green peers. As an additional analysis, we find evidence of superior stock performance by green REITs over their non-green peers using Jensen's alpha as a measure.*

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The growing concern for the environment and social reporting (i.e., corporate social responsibility) has led to an effort at more responsible investing across the industrialized world. Organizations such as the Global Reporting Initiative (GRI) provide measurement guidance for those striving towards a more sustainable global economy. According to GRI, "A sustainable global economy should combine long-term profitability with social justice and environmental care. This means that, for organizations, sustainability covers the key areas of economic, environmental, social and governance performance." Such initiatives, and others like this, have impacted the way organizations do business. Everyone from the supply chain to manufacturing to the consumption chain is affected. This new social and environmental conscience has also been felt by investors. Some call it socially responsible investing, where the investor is concerned about the financial aspects of the asset, as well as its "environmental impacts."[1] The focus of this study is the direct economic impact of sustainable real estate investing.

In the last decade or so, there has been a significant impetus for greener buildings. The United States Green Building Council (USGBC), a nonprofit organization, has taken large initiatives towards a prosperous and sustainable future for our nation through cost-efficient and energy-saving green buildings. The USGBC is the driving force of a green industry that is projected to contribute $554 billion to the U.S. gross domestic product from 2009 to 2013. Buildings in the U.S. are responsible for 39% of CO^2 emissions, 40% of energy consumption, 13% of water consumption, and 15%

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of GDP per year, making green building a source of significant economic and environmental opportunity. Greater building efficiency can meet 85% of future U.S. demand for energy, and a national commitment to green building has the potential to generate 2.5 million American jobs.[2] Two of the most common and popular measures in the U.S. by which a building can be judged to be environmentally friendly are the ENERGY STAR label system and the Leadership in Energy and Environmental Design (LEED) certification system. ENERGY STAR, which is older than LEED, was created by the Environmental Protection Agency (EPA) in 1992. It provides commercial building developers and owners with an overall energy management score, designed to benefit both the environment and the owner's bottom line. The ENERGY STAR program is designed to measure a building's relative performance, using a lagged benchmark a score of 75 or better out of 100.[3]

LEED, a more recent initiative of the U.S. Green Building Council, takes a much broader approach considering people, planet and profit, not just energy use. The triple-bottom line factors in the economic, environmental and social issues present throughout the entire building process from concept, design, development and future operation. LEED is a highly quantified and systematic approach to buildings of all types. LEED and ENERGY STAR are complimentary to each other. Buildings may be both LEED-certified and ENERGY STAR-rated; in fact, LEED requires minimum ENERGY STAR scores as part of its existing building rating system.

Because of the specific requirements for the ENERGY STAR and LEED measures of buildings, becoming ENERGY STAR-labeled or LEED-certified is time-consuming as well as expensive for developers and owners of the buildings. However, if there are financial rewards for acquiring these labels, owners will not be averse to going after the certifications. However, quantifying the financial rewards is challenging. There is some evidence to support financial rewards for the investor/property owner. Surveys by institutions in the U.S. of LEED-certified buildings and property managers have revealed higher rents for owners and sometimes lower operating costs over the years.[4] Several studies discussed in the next section provide evidence of rental premiums, faster absorption of available space, and higher values for direct investments in real estate. The perceived additional costs associated with building greener construction is still a hurdle for some owners.[5] At the same time, at the firm level, the question of whether pursuing a green strategy as part of corporate social responsibility (CSR) provides any benefits at the operational level or if that results in higher yields and/or capitalizes into value is yet to be fully answered.

This study aims to fill this gap by providing empirical evidence of the financial benefits to REITs following a corporate strategy that targets achieving sustainable standards by investing in greener buildings. We use real estate investment trusts (REITs) as investors/owners of properties in this study to test our hypothesis. We hypothesize that REITs that follow a responsible "green" strategy will show superior performance than their counterparts. Creating a proxy for such green REITs, we test if they have superior valuation as measured by Tobin's q. We further test for superior performance at the operating level. An additional test on the stock performance of such firms is also conducted.

This study makes a significant contribution to the literature on green buildings in the public real estate domain. This is the first study that analyzes the link between following a sustainable strategy at the corporate level and the financial benefits that accrue from such a strategic initiative. A study by Becker-Olsen, Cudmore, and Hill (2006), amongst others, find that a proactive CSR strategy leads to favorable attitudes towards the company. In the long run, the firm's value is reflected in better investor perception, which could lead to higher returns. At the corporate level, a step taken to initiate a "green" strategy is one way of a proactive CSR practice. This study attempts to link this proactive CSR approach by REITs and a firm's value. The proactive approach of a company is measured by the voluntary participation of a REIT in the ENERGY STAR program.

From a portfolio perspective, this study provides insight into the benefits of socially responsible investing in real estate and provides some aid to the

growing number of "green funds" in the real estate industry. Our results provide evidence of investing and maintaining a green portfolio by REITs. We find some evidence of a positive relationship between greener REITs and their associated values as represented by its Tobin's q. Further, we find that REITs that became ENERGY STAR partners have a higher return on assets than their less-green peers.

The remainder of the paper is organized as follows. We begin with a discussion of the literature on green buildings and sustainable investing. Then, we discuss the details of the data and the methodology. Next, we present our results of the analysis. In the last section, we present our conclusions.

Literature Review

The studies on green buildings have been increasing in the last few several years. Researchers have attempted to determine the benefits accruing to users of green space and the owners of such buildings. In a study of office buildings in the U.S. market, Chijs (2008) finds evidence of higher rents and lower vacancies for green buildings. This finding is similar to that found by Nelson (2007), who looked at LEED and ENERGY STAR buildings. Other studies such as Eichholtz, Kok, and Quigley (2008) and Fuerst and McAllister (2008) find similar results for rent premiums (4.4% and 9.2%, respectively) and occupancy rates (higher by 7% and 2%, respectively). In a more rigorous study, Wiley, Benefield, and Johnson (2010) find higher rents and higher occupancy for green buildings. They examine 46 office markets covering 7,308 properties. Their results indicate a rent premium of 15.2% to 17.3% on LEED-certified buildings after controlling for region and lease type. The premium for ENERGY STAR buildings was much lower, from 7.3% to 8.9%. In terms of occupancy, the authors found 16.2% to 17.9% higher levels in LEED-certified buildings compared with others when controlling for vintage. In terms of the pricing of green buildings, Miller, Spivey, and Florance (2008), who control for various factors such as age, location, and size, find evidence of sales premiums up to 10% for LEED-certified buildings and up to 5.76% for ENERGY STAR buildings. In addition to higher rents and higher occupancy rates of LEED buildings, there is also evidence of the faster absorption of such buildings (Miller, Spivey, and Florance, 2008). On the social investment aspect of real estate, there has been a series of work on responsible property investing (RPI) (Pivo and McNamara, 2005; Pivo, 2009, 2010). These studies show that companies are trending towards more sustainable investments in their real estate portfolios. In another study, Pivo (2008) uses a panel of experts to develop guidance and future direction for RPI portfolio audits, database development, third-party assessments of property companies, strategic consulting, the development of corporate reporting standards, RPI certification procedures, updated green building assessment tools, and cost-benefit studies to help guide asset managers. The study uses the Delphi Method to prioritize criteria for the evaluation of property investments.

In the finance discipline, there has been considerable work done that has looked at the relationship between CSR and stock performance using operating measures as well as return measures. In a study of 321 firms, Konar and Cohen (2001) explore the relationship between Tobin's q, a measure of value, and environmental performance. The authors use two proxies to measure environmental performance: toxic release inventory (TRI) emissions and the number of environment-related lawsuits pending against the firms. Their results indicate a loss of $380 million tied to environmental performance. In another study, King and Lenox (2001) use environmental data from 652 companies gathered for 10 years from 1987 to 1996. After controlling for industry-level environmental factors and other firm-specific factors, they find a positive relationship between Tobin's q and environmental performance. In yet another study linking environmental measures to financial performance, Khanna and Damon (1999) examine publically listed chemical companies. Their study is based on the voluntary participation of chemical companies in a program initiated by the EPA. They find that a 27.9% reduction of chemical releases between 1991 and 1993 of firms is attributed to the participation in one of their voluntary programs called the 33/50 program.[6] They find that participation

in the program negatively affects the return on investment, but positively affects the excess value as a percentage of sales. The authors conclude that there are long-term financial benefits from the program; however, with short-term losses.

This study is also based on similar lines of voluntary participation of companies in environmental programs such as ENERGY STAR. The participation by REITs in environmentally related programs is used as a proxy for them being in the domain of green and sustainable investments, and having taken initiatives towards being green as well. To date, we are aware of just one study that looks at green REITs and their performance. Eichholtz, Kok, and Yonder (2012) examine the relationship between the operating and return performance of REITs and their greenness. They find a positive relationship between the greenness of a REIT and the associated operating performance. They also find that a green portfolio positively impacts the return on equity and cash flows. Our study provides further evidence favoring green investments at the firm/fund level to the study by Eichholtz, Kok, and Yonder (2012). However, we look at a different aspect of going/being/declaring to be "green." We look at strategic initiatives of REITs in aspiring to be green, identify such a group, and link this proxy to its impact on value as measured by Tobin's q. Further, we look at return on operating assets as a measure of the impact on the operating performance of such green REITs.

The ENERGY STAR Partnership Program

One of the challenges in the area of green investments is quantifying such investments. One way would be to be declared a "green fund." A host of mutual funds tend to differentiate their investment style in this way, but no such differentiation exists for REITs. In the absence of such a distinction, alternative measures of green investments must be found. At the direct property level, the ENERGY STAR and LEED labels can be used to measure green buildings. However at the fund level, no such labeling can be done. Because of the cost and implementation aspects of these two labels, there are hardly any REITs that can be said to have significant green properties. But funds that follow a proactive approach can take steps to show investors, shareholders, and their peers of their intention to be in the "green or sustainable" property domain. These intentions or actions are quite noticeable at the strategic level of decision making, which then may percolate to the lower execution level. Such an initiative is the proxy used in this study and follows from Nadeau, Cantin, and Wells (2003) to classify green REITs. They use the ENERGY STAR Partnership program as a proxy for REITs that are targeting green real estate investments, and hence trying to position themselves as green funds. Under this program, REITs or other companies can become a partner by submitting a partnership letter. Partners and others are provided a set of valuable resources to improve the energy efficiency of their properties. Although the program is voluntary, the companies do commit to measure, track, and benchmark energy performance as well as educate staff and the public about their partnership status. They also commit to developing a plan to improve energy performance. While there is no monitoring mechanism in the program, one would believe that the companies that participate would be more likely to follow a green strategy and are proactive in their approach as well. Their association with this program may also add to their investor image and result in enhanced value or maybe returns. While investing responsibly is an intangible benefit, it could add strength to the REIT's CSR case. Whether such strategic initiatives at the firm level translate into any superior financial or operating performance is the focus of this study.

Data and Methodology

In this study, REITs that partner in the program sponsored/endorsed by the EPA are classified as green REITs. Using the list of REITs that have signed up as partners under the program, we explore the relationship between their value and the factors affecting this value.[7] The list of partners (REITs) is available at the ENERGY STAR website. There are over 100 REITs that have declared themselves as partners under this program since it was launched in 1999; however, whether they decide to stay as partners after initial declaration

could lead to lower number of such REITs in subsequent years. For measuring firm value, we use Tobin's q as used by studies such as Konar and Cohen (2001) and Nadeau, Cantin, and Wells (2003). Following Hirsch and Seaks (1993) and Konar and Cohen (2001), Tobin's q can be interpreted as the ratio of a firm's intangible to tangible value. It is this intangible value that our study is interested in capturing. Because many benefits arising out of investing in "green buildings" are intangible, such as better corporate practices, improved productivity for employees, and superior management of the company to name a few, it is essential that our measurable proxy of value (Tobin's q) captures these intangibles. Moreover, it also captures the tangible benefits derived from joining sustainable initiatives such as the ENERGY STAR program, which may result in lower operating costs, which directly affects the net operating income of REITs.

Data for this study are from various sources. Quarterly financial data relating to REITs are from the SNL REIT database and CRSP from the first quarter of 2009 to the third quarter of 2010. Data relating to ENERGY STAR programs and the partners are collected from the ENERGY STAR building program. Although the EPA website provides the list of partner REITs, it does not give any information on which year the REITs became partners in the voluntary program or in which year they left the program. Although over the sample period there are more than 50 partners and more than 100 non-partners, data for all the variables in this study are not available for many of them. When we try to expand the sample period to encompass a larger time period, there is a loss in REITs due to unavailability of data on some or all the five variables we use. Thus, over the sample period, filtering for available data for the dependent and independent variables, the final sample contains 18 partner REITs and 49 non-partner REITs.

Model 1: Quantile Regression

We start by running the basic model (Model 1) to test if partnership is correlated with the Tobin's q. A regression equation is set up with Tobin's q as the dependent variable and a host of independent variables. However, we run a quantile regression to see the correlation across various quintiles of the q ratio. The independent variables used in the model are return on average assets (*ROA*), leased area (*LA*), total assets (*TA*), 3-year beta (*Be*), a dummy for program partnership (*P*), and EPS growth (*EPG*). These are the control variables that may impact valuation.

$$q = \alpha + \beta_1 ROA + \beta_2 LA + \beta_3 TA + \beta_4 Be + \beta_5 P + \beta_6 EPG + \varepsilon. \quad (1)$$

Model 2: Panel Data

Model 2 is the panel data model. Both fixed-effects and random-effect models are fitted for this regression.

$$q_{it} = \alpha + \sum_{1}^{k} \beta_j X_{jit} + \varepsilon_{it}, \quad (2)$$

where the dependent variables are the same as in Model 1.

Model 3: Dynamic Panel

The last model we run is the dynamic panel model (Model 3). This is necessary as there could be some correlation between the current Tobin's q and its value in the previous period. Also, this model factors that the choice of being a partner in the ENERGY STAR program is an endogenous decision. We run this model with one lag and two lag dependent variables.

$$q_{it} = \gamma q_{it-1} + \sum_{1}^{k} \beta_j X_{jit} + \varepsilon_i + \varepsilon_{it}. \quad (3)$$

$$q_{it} = \gamma q_{it-1} + \delta q_{it-2} + \sum_{1}^{k} \beta_j X_{jit} + \varepsilon_i + \varepsilon_{it}. \quad (4)$$

Results

Exhibit 1 presents the descriptive statistics for the two sample groups. Partner REITs have 13.5% of their buildings ENERGY STAR-labeled compared with only 2.1% for the non-partner REITs. One would assume that this number may be even lower for LEED-certified buildings for both of the groups

Exhibit 1
Descriptive Statistics

Mean Values	Non-Partner REITs	Partner REITs	*t*-stats for Difference
Tobin's q	1.20	1.12	2.67*
ROAA (%)	0.83	1.12	−0.46
Lease area (sq. ft.)	30.70	73.81 mn	−4.10*
Labeled	2.10%	13.5%	−2.37*
Total assets (US$)	3.53 bn	6.56 bn	−3.21*
Beta	1.5	1.73	−1.84**

Notes:
* Significant at the 1% level.
** Significant at the 5% level.

due to the stricter certification process and requirements for the LEED label. This shows that strategic initiatives at the management level do lead to a significant higher green portfolio at the implementation/execution level. Partner REITs also have a higher return on average assets than non-partner REITs.

We also see that partner REITs are much larger than their counterparts as demonstrated by their larger leased area and the higher value of their total assets. When we look at market sensitivity, partner REITs have higher three-year market beta and, hence, are more tied to the market than the non-partner REITs. The only variable for which the non-partner REITs have a higher value than partner REITs is Tobin's q.

Quantile Regression

Exhibit 2 displays the results for the quantile regression. Our main variable of interest is the partner dummy as we are interested in its relationship with Tobin's q. Most of the coefficients of the partner dummy are negative with two of them being highly significant. This implies that partner REITs have low Tobin's q. While intuitively this may not make sense, one may argue that any investment-related decision could either impact value, impact return on assets or both. For Model 1, the results show that they do not impact value as measured by Tobin's q. Thus, we need to look at the outcome of the other models to see the robustness of the results from our first analysis.

Exhibit 2
Coefficients—Quantile Regression Results

	ROA	LA	TA	Be	P	EPG
0.05 Quantile	0.015	0.000	0.000	0.626*	−0.064	0.000
0.25 Quantile	0.001	0.000	0.000	0.873*	−0.048*	0.000
0.50 Quantile	0.000	0.000	0.000	0.945*	−0.008	0.000
0.75 Quantile	0.000	0.000	0.000	0.984*	0.018	0.000
0.90 Quantile	0.013	0.000	0.000	0.951*	0.000	0.000
0.99 Quantile	0.052	0.000	0.000	1.132*	−0.304	0.001*

Note:
* Significant at the 1% level.

Exhibit 3
Coefficients—Panel Data Model Results

Independent Variable	Random Effects	Fixed Effects
ROA	0.001	−0.008
LA	0.000	0.000
TA	0.000	0.000
Be	0.481*	1.066*
P	−0.038	−0.019
EPG	0.000	0.000

Note:
* Significant at the 1% level.

Panel Data and Dynamic Panel Model

The results from Model 2 for both random and fixed effects are shown in Exhibit 3. We see that

the variable of interest, *partner*, is not significant in either the random or fixed effects model. We then run the dynamic panel model (Model 3) with one lag. In this model, the partner variable is dropped because of collinearity. Therefore, we run this model with two lags of the dependent variable. The results show a high value of the autoregressive parameter. In such a case as ours, where the autoregressive parameter γ is relatively large and the number of the time period is small, the Blundell Bond (1998) estimator is appropriate for the dynamic panel model. The results for this estimation are shown in Exhibit 3.

With the new model, the partner variable is both positive and significant. This implies some form of positive relationship between a REIT being green and its value as represented by its Tobin's q. Although the level of significance is low (at 10%), it still shows a direct relationship between the two variables. Similar to the results found by Eichholtz, Kok, and Yonder (2012), the only other study on green REITs, our study further confirms the benefits accruing from investing in a green and sustainable portfolio at the firm level for REITs.

Robustness Checks

Operating Performance

In the previous section, we established a positive relationship between the green initiatives of a REIT and its value. However, because a REIT is an operating entity, it is important to explore the effect that holding a sustainable and green portfolio has on the operating performance of a REIT. For this analysis, we run a regression using return on assets as a measure of operating performance. We run the analysis using both one lag and two lags of the dependent variable. The regression with one lag is shown in Equation 5.

$$ROA_{it} = \alpha + \gamma ROA_{it-1} + \beta_1 X_{it} + \varepsilon, \qquad (5)$$

where X is the vector of REIT characteristics. These are q ratio, lease area, beta, total assets, and partner.

The results of the regression are shown in Exhibit 4. The coefficient of the partner variable is large, positive, and highly significant for both the lags being used. This shows that green REITs that hold a larger sustainable portfolio have a higher return on assets. However, looking at one of the other significant results, we find an inverse relationship between return on assets and Tobin's q. While this is counterintuitive as one would expect a positive relationship between the two measures, one could argue that the impact of a green portfolio could be either on value, on return on assets or both. The results from our analysis suggest that the impact is reflected on Tobin's q rather than on return on assets. It may take some time for a sustainable portfolio to impact return on assets, which could explain the results. In the future, with larger proportions of REIT assets in sustainable real estate, we may be better able to tease out these effects. In summary, for our sample of REITs, we find a positive relationship between REITs that became ENERGY STAR partners and their return on assets. The REITs that became partners in the program can serve as a proxy for REITs that are greener than others, but did not become partners in the program. Based on our results, we could argue that REITs with a larger portfolio of green buildings (as measured by the ENERGY STAR label) tend to do better than their less-green REIT peers based on return on assets.

Exhibit 4
Coefficients—Operating Performance Regression

Independent Variable	2 Lags	1 Lag
ROA_{t-2}	0.546*	—
ROA_{t-1}	0.092	−0.265*
q	−28.525*	−16.677*
LA	0.000	0.000
TA	0.000	0.000
Be	18.511**	8.152***
P	26.88*	33.919*

Notes:
* Significant at the 1% level.
** Significant at the 5% level.
*** Significant at the 10% level.

Abnormal Returns

Having analyzed operating performance as one the output measures for green REITs, it is also important to look at the returns shareholders may

Exhibit 5
Abnormal Returns

Model	Partner REITs	Non-Partner REITs
CAPM	0.018*	0.0001
Fama-French	0.014**	0.0026
Carhart	0.0093***	0.0045***

Notes:
* Significant at the 1% level.
** Significant at the 5% level.
*** Significant at the 10% level.

achieve due to such an initiative, if at all recognized by them. To test for abnormal returns, we form value-weighted portfolios for two groups using monthly return series from January 2005 to September 2010. For each group, we calculate Jensen's alpha for the CAPM, Fama-French, and Carhart models. The results for the abnormal returns for both the groups are shown Exhibit 5.

Partner REITs with significantly larger green portfolios have higher returns than their non-green peers. If we just look at the abnormal returns from the Carhart model for both the groups (as it is significant for both the groups), the difference in returns translates into 5.68% annualized higher returns for partners than non-partners.

Conclusion

In recent years, sustainability has been the focus of many direct real estate studies. Most of these studies focus on individual green buildings and the impact of sustainable measurements on rent, occupancy, sales prices, and/or operating performance (Eichholtz, Kok, and Quigley, 2008; Fuerst and McAllister, 2008; Miller, Spivey, and Florance, 2008; Wiley, Benefield, and Johnson 2010). There is also a sizeable body of research on responsible property investing (RPI) by Pivo (2008, 2009, 2010), which highlights the long-term benefits of investing in green and sustainable buildings to investors. In similar lines, many REITs that own income-producing real estate and are traded in the capital markets have started to build a green portfolio over time. Beyond the benefits of achieving a more socially responsible portfolio, we ask here if shareholders have benefitted directly from green initiatives. Unlike other studies in this domain, our focus is the strategic initiatives by the REIT management. We identify steps taken by the management to associate/link themselves to sustainable and green development and/or investment. This is done to separate the "green" REITs with their non-green peers.

Using strategic initiatives as a method of identifying green REITs, we use Tobin's q, a proxy of the value of a firm previously demonstrated by Hirsch and Seaks (1993) and Konar and Cohen (2001), to explore the questions of superior performance of green REITs. We use quarterly data from 2009 to 2010 to test the relationship between the sustainability initiatives of REITs and firm valuation. As mentioned before, this study uses the participation in a voluntary program initiated by the EPA as a proxy for being a green REIT.[8] ENERGY STAR is designed to measure a building's performance, create practical operating benchmarks/goals, and help monitor performance. Our results provide positive evidence of investing and maintaining a green portfolio by REITs. Depending upon the type of model used, and the choice of modeling, the decision to participate in the voluntary program is associated with evidence of a positive relationship between these green partner REITs and their value as represented by their Tobin's q. Further, we find that REITs that became ENERGY STAR partners have a higher return on assets than their less-green peers. At the returns level, we find that green firms have produced an annual higher return of 5.68% more than their non-green peers from 2005 to 2010. Similar to results found by Eichholtz, Kok and Yonder (2012), this study provides further evidence of the benefits derived from REITs that own greener buildings. The difference being that this study links the strategic initiatives of REITs in achieving greener investing with direct shareholder benefits, using a completely different approach than has been tested to date.

Endnotes

1. See Gary Pivo's "Is There a Future for Socially Responsible Property Investments?" *Real Estate Issues*, Fall, 2005 as an early discussion of this topic, or Gary Pivo and Jeff Fisher's "Toward Sustainable and Responsible Property Investment Indices" prepared for Strengthening the Green Foundation:

Research and Policy Directions for Development and Finance held at Tulane University, New Orleans, March 10–11, 2011.

2. Source: www.usgbc.org.
3. In theory this suggests a top 25% relative performance but since the benchmark is lagged, it is possible for more than 25% to achieve this objective.
4. Source: BMC-CBRE annual study of tenants and owners.
5. Several studies have indicated that he costs to become LEED Silver or Certified are negligible (e.g., Kok, Miller, and Morris, 2012).
6. The 33/50 Program targeted 17 priority chemicals and set as its goal a 33% reduction in releases and transfers of these chemicals by 1992 and a 50% reduction by 1995, measured against a 1988 baseline.
7. The list of partners (REITs) is available at the ENERGY STAR website. There are over 100 REITs that have declared themselves as partners under this program since it was launched in 1999.
8. This follows the same way of quantifying green as Nadeau, Cantin, and Wells (2003).

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