STRATEGIC DECISION CRITERIA ANALYSIS FOR BROWNFIELDS REDEVELOPMENT

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Overview

Economic demands and other factors are motivating companies to focus their attention on idle, environmentally impaired properties commonly known as “Brownfields” or, if the company has entered into a federal or state-funded program as “excess property development opportunities”. Some electric utility sites designated as such may be excellent candidates for redevelopment or reuse.

The Electric Power Research Institute (EPRI) and Research Triangle Institute (RTI International or RTI) are working together to advance the development of a pilot project for the electric power industry using a tool that was originally developed by RTI to aid in selecting candidate properties for redevelopment. The tool uses a beta test multi criteria decision analysis (MCDA) application on a few candidate sites from one or more utility portfolios. It evaluates various site-specific attributes related to marketability, community, financial and environmental restoration from a portfolio perspective. The results of the portfolio analysis will serve as a best practices strategy for realigning or divesting underutilized or idle property assets.

The pilot project will be presented with a statistically robust set of models, best practices, and work processes form the core of the offering, specifically driven by SBS Discovery, a commercial MCDA system framework. This system develops a unified analytical framework that facilitates collaboration among key stakeholders and decision makers. The system is provided by RTI and applies streamlined work processes to evaluate surplus properties and develop and execute disposition strategies. EPRI is evaluating this type of system for the power industry to determine how it can help optimize a utility’s long term property management strategy.

The backbone of SBS Discovery is a proprietary, web-based assessment and decision support system that provides a rigorous method for consolidating what is known about all idle properties in an organization’s property portfolio. The system provides a single, integrated data analysis and reporting engine that centralizes the data necessary to analyze properties. An interactive map allows each user to view all properties in the portfolio and to “drill down” into the relevant data at a site. The property owners have access to a variety of graphical information system (GIS) tools and the user can input preferences regarding financial goals and risk tolerance—thereby forming the basis on which to select the preferred strategy for each property.

The portfolio analysis procedure first evaluates conditions that may influence the site’s highest and best end use. It further develops the analysis using parameters such as real estate market conditions and demand, human health risk, site geology, contaminant concentrations, regulatory requirements, and financial incentives. Other factors may be considered such as ecological-assets¹, cultural features, neighborhoods, and economic development.

Once the MCDA model is developed, alternative properties can be analyzed and evaluated to determine the benefits of redevelopment within a specific geographic area. This output provides a rigorous and

¹ e.g. Conservation and wetland banks.
transparent method of decision making and develops a sound business strategy for redevelopment of excess properties.

**Methods of developing Drivers and Market Conditions**

Companies are increasingly focusing attention on some of their idle or environmentally impaired properties. This tool provides the opportunity to see these distressed or idle sites as potential sources of economic gain rather than balance-sheet liabilities.

Drivers include:

1. A shift in perception of environmentally impaired properties,
2. Newly developed insurance products,
3. A wider availability of capital, and
4. Changes at a government or regulatory level*.

*These drivers can also include modifications to state environmental policies, a shift from government-driven cleanups to private-sector transactions, new accounting standards (FASB 143/FIN 47), and the Sarbanes-Oxley Act—a primary legislative driver that encourages corporations to move idle properties off the books$^2$.

Some recent financial and environmental policy changes are detailed below:

- Companies disclosing environmental contingencies such as any known trends or demands, commitments, events, or uncertainties may reasonably have a material impact on net sales, revenue, or income from continuing operations. This disclosure requirement would include potential costs associated with environmental compliance.
- Beginning in December 2005, public and non-public companies that prepare audited financial statements are required to report previously undisclosed liabilities for environmental cleanup obligations associated with environmentally impaired properties and facilities, including conditional legal obligations such as abatement of asbestos-containing materials or remediation of contaminated soil and groundwater.
- Federal, state, and local governments provide incentives for Brownfield cleanup and redevelopment. Some of these incentives are provided directly to communities and local governments, while certain incentives are offered only to property owners:
  - Federal, state, and local tax incentives,
  - Grants and low-interest loans,
  - Technical assistance and streamlined government oversight of cleanups, and
  - Liability protection.

$^2$ The Sarbanes-Oxley Act of 2002 requires corporations to disclose the material effects of compliance or noncompliance with environmental requirements on capital expenditures, earnings, and the competitive position of the registrant or its subsidiaries. The act affects corporate finances, disclosures, audits, conflicts of interest, governance, and ethics. Regulations require a company to certify that for each required financial SEC filing, disclosure controls and procedures are in place to ensure that material information, including environmental information, is brought to the attention of appropriate corporate officers with adequate time to make informed disclosure decisions.
Even though these factors may motivate companies to move these properties off their balance sheets, several barriers, both internal to the company and as external forces, exist. These barriers may prevent these transactions from occurring.

Results of Identifying Possible Barriers to Redevelopment

Some recent project examples which illustrate barriers to redevelopment are cited below. RTI has managed these issues for other industries. These could easily be the same issues facing the electric power industry. Two scenarios of some of the major issues include:

Over Accumulation of Real Estate Holdings: A major industrial firm accumulated properties over decades of operation. Hundreds of properties were deemed as surplus properties because they were no longer needed by the operating businesses. In addition, recent mergers and acquisitions added properties to their property inventory. Cumulatively, these underutilized properties had a high cost of ownership due to carrying costs associated with meeting acceptable property stewardship standards (e.g., property taxes, insurance, maintenance), liabilities associated with the land and buildings, and in some cases, clean-up costs due to previous environmental contamination of soil, water, or groundwater. Although these properties were not optimally used by the current owner for many different reasons, the portfolio had substantial value in the real estate market value that was not being realized by the current owner.

Inheriting Idle Properties: For many years, some firms built up excess properties through acquisition and mergers and not by direct purchase. Many of these properties stood idle for many years after a merger or lost full use due to changing business strategies. In this situation, the company attended only to routine maintenance and environmental clean-up necessary to comply with environmental regulations. However, the factors previously mentioned (e.g., Sarbanes-Oxley, developer interest, new accounting standards, community pressures) have drawn the attention of corporate executives to these properties and the value of returning them to productive use: generation of revenue, reduction of liabilities, resolution of environmental problems, and benefit to the communities where they are located. Action, however, is not easy: many challenges must be overcome first. One firm’s inherited property portfolio included hundreds of properties, and data on these properties were dispersed and maintained in organizational silos from past organizations so that no one person or organizational unit had a complete picture of any given property. The stakeholders in the firm had no unified framework for analysis and collaboration, and each stakeholder had a different perspective and set of incentives to act or not act. In most cases, relevant information was simply missing. In other cases, remediation managers did not see the value of the property or real estate managers were not always privileged to know the remediation strategy, and the CFO communicated the magnitude of the carrying costs only to the financial people in the company.

Developing the Knowledge Base

The MCDA provides a renewed work process and framework for decision-making to identify new markets and divestiture strategies for a set of known properties or recently acquired properties. Barriers to achieving this goal may include lack of consolidated knowledge within a company about the potential upside market value of these properties.

Specifically, corporations with large portfolios seek to know:

Risks—Financial and Otherwise

When developing a redevelopment property program, corporations are interested in the financial costs, gains, and risks associated with redeveloping a site, as well as how an idle site may affect the community. Because funds for redeveloping a Brownfield site or surplus property are limited, it is imperative to accurately gauge both the cleanup costs and the potential profit from selling the land once it has been
redeveloped. Ultimately, it is ideal to know whether to redevelop a site to maintain or enhance a company’s bottom line.

Furthermore, companies should weigh all the risks associated with site redevelopment and ask many questions: For example, will doing nothing with a particular site cause more harm to the community? Will redevelopment actions affect indoor air? What will the net benefits or liabilities if a site is donated? Corporations should want to gain a solid understanding of the situation before proceeding to decision-making. By thoroughly understanding all the issues surrounding a particular site, they can ensure that their actions 1) do no harm, 2) are based on informed decisions, and 3) keep them well-positioned to remain in control of any potential liabilities.

**Community Concerns**

Finally, corporations are concerned about their communities and the role they play within them. By striving to keep communities clean, a company’s redevelopment activities not only can be protective of human health and the environment, but it can also have a net effect on increasing jobs within an area which ultimately helps support a healthier tax base. This can serve to provide a sustainable and long term corporate image for some companies.

**Conclusions**

**MCDA – The Right Tool at the Right Time**

The problem for many owners of the property is identifying the right properties from their candidate sites to redevelop, donate or sell. When market value, community benefit, financial outcome, and environmental liability are corporate drivers, the MCDA is an excellent tool to evaluate the options.

By compiling information on the attributes of candidate properties including highest and best use market value, re-entitlement opportunities and risks, financial metrics, environmental clean up alternatives and costs, a ranking system can be created. Using an MCDA for strategic management could be a smart addition to benchmarking for a refined strategy of best practices to corporate real estate management. Relative ranking of the decision criteria are derived from the stakeholder group’s various requirement. The output is a rank order of the alternatives; which property or properties are the top candidates for investment, sale or donation. The decision about whether to invest funds to achieve the outcomes associated with divesting the firm of a surplus property can then be made with more assurance.

**Selected References:**


Taub, Stephen, 2006. *Ashland Settles Dirty Reserves Case*: *Ashland settles SEC charges, raised initially by a whistleblower who invoked Sarbox protections, that the company boosted income by understating its environmental reserves*, CFO.com, November 30.