

CORRIDOR ECONOMIC ASSET &
OPPORTUNITY ANALYSIS
30th ST. INDUSTRIAL CORRIDOR





CORRIDOR ECONOMIC ASSET & OPPORTUNITY ANALYSIS 30th ST. INDUSTRIAL CORRIDOR

Project Description

Vandewalle & Associates was retained by the City of Milwaukee Department of City Development to conduct an Economic Asset & Opportunity Analysis for the 30th St. Industrial Corridor. The Analysis was intended as an initial step in a 30th St. Corridor job creation and economic replacement initiative.

Short-term, overarching goals of the 30th St. Corridor Jobs Initiative are to:

- Position the Corridor for targeted emerging economic opportunities and end users;
- Position the Corridor for state and federal stimulus employment incentive funding;
- Build significant momentum for the revitalization of the Corridor and give leaders and stakeholders comfort that there is an economic “plan of action”;
- Align major corporations and key investors around a strategy for economic restructuring.

In the Economic Asset & Opportunity Analysis, the City of Milwaukee was interested in examining the Corridor’s assets, opportunities, and potential roles in the “big picture” local

and regional setting. The goal was the development of economic and strategic opportunities that align with global economic trends to encourage the genesis of a vibrant 21st Century economy in the Corridor and its neighborhoods.

The Asset and Opportunity Analysis included review and analysis of existing studies, plans, and data pertaining to the Corridor; discussions with key City staff, initial identification of leveragable assets and potential opportunities; research and refinement of concepts; and preliminary development of key opportunities and target stakeholders, partners and companies.

Pursing implementation of the opportunities presented will require dedicated collaboration between the public and private sector and across all levels of government. An initial implementation plan and discussion of partners and roles is provided at the end of this document.

SUMMARY OF FINDINGS

ASSETS. The 30th St. Industrial Corridor’s strongest assets for businesses are its connectivity to multiple modes of freight transport; underutilized sites that are already piped, paved, and within existing service areas; sites that are within walking distance of a large



workforce; a location well-served by workforce training centers, active Business Improvement Districts, and other business and neighborhood organizations; its concentration of manufacturing Research & Development (R&D) and engineering expertise; and a location within a core of global corporations and supply chain networks driving the Clean & Green Economy by developing innovative products that offer improved efficiency and a smaller negative impact on the environment.

GOALS. Milwaukee has an opportunity to simultaneously pursue its goals of creating jobs, revitalizing underutilized industrial sites, and aligning the area's assets with emerging economic opportunities through development of a Great Lakes Green Industry Complex. The region’s potential for engagement in the Clean & Green Economy is already recognized—evidenced by major area corporations, such as Johnson Controls, Rockwell Automation, Modine, and Johnson-Diversey, that are embracing these new opportunities, developing off their core strengths of innovative production, and refocusing their market and production orientation toward the new economy. A Great Lakes Green Industry Complex would allow Milwaukee to advance its existing assets and strengths, promote a comprehensive vision for the Corridor on a local, regional and national scale, and strategically position the City for emerging programs and funding opportunities.

POSITIONING IN CLEAN & GREEN ECONOMY.

Leveraging these assets to grow in this new economy will necessitate the City:

1. Create a centerpoint at which to focus efforts—the 30th St. Industrial Corridor.
2. Help generate market demand for Clean & Green products through public policy strategies, procurement strategies, and action.
3. Establish a market identity by broadcasting the City’s vision.
4. Build innovation capacity through collaboration with public and private R&D in the Corridor.
5. Leverage local global corporate expertise and networks to grow employers.

Context: The 30th St. Industrial Corridor

The 30th St. Industrial Corridor developed along the rail line connecting from the Port of Milwaukee, through the Menomonee Valley, then an amalgamation of industry, manufacturing, stockyards and tanneries, to the north along 30th St. in Milwaukee's near west side.



Development adjacent to the rail afforded businesses direct access to markets throughout the Midwest and beyond, fueling the vitality of the Port of Milwaukee and the success of the Milwaukee Road railroad during the mid-twentieth century.

Dense industrial development along the rail corridor grew to cover a five mile north-south swath of the City, surrounded in all directions by generally well-built, urban housing. The result was a dense, walk-to-work community sparked by the tens of thousands of jobs concentrated in major Corridor employers such as A.O. Smith, Cutler-Hammer, and Miller Brewing, and numerous other manufacturers, foundries, breweries, and tanneries.

The infrastructure that served this historic core of production remains, but production itself has declined sharply over the past three decades. Underutilized and vacant buildings and parcels dominate the landscape. Oriented toward the rail line, they include a mix of hulking major industrial sites and small lots affording just enough rail frontage for freight loading. Nonetheless, several major employers remain and have reinvested millions of dollars into upgrading their facilities, including well-known corporations such as Eaton, DRS Technologies, Master Lock, Miller Brewing, and Harley-Davidson. However, the remaining employers of the Corridor cannot support the concentrated populations as they once did. Today, this densely-populated area's rates of unemployment and poverty are among the highest in Milwaukee.

Asset Analysis

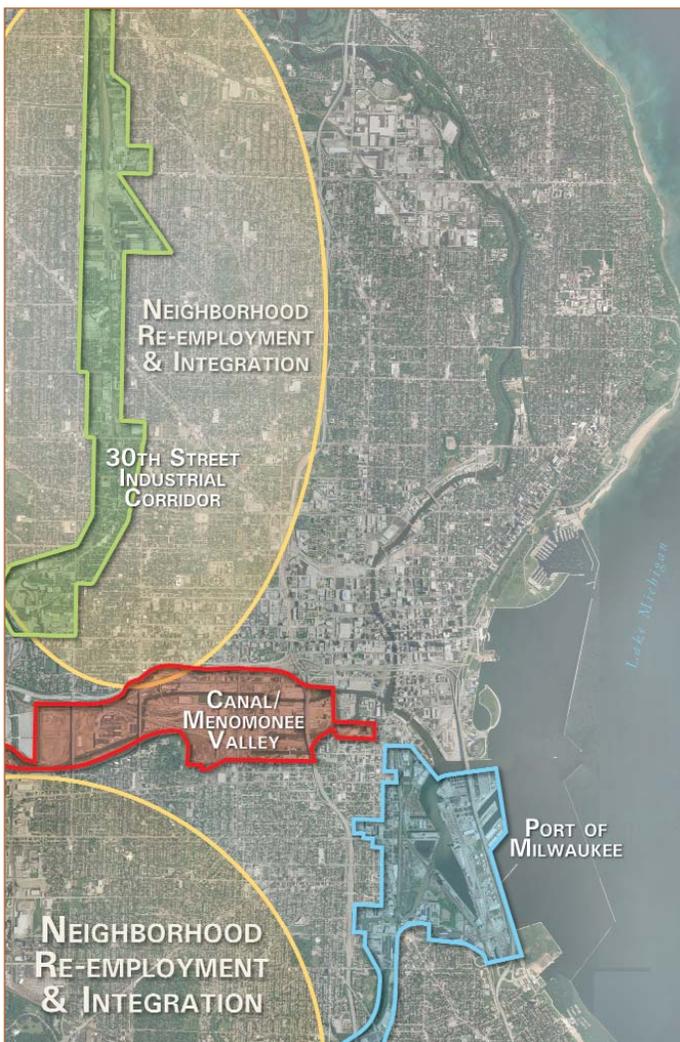
An asset-based approach to opportunity identification leads to opportunities which are rooted in the economic, social, and infrastructural realities of the Corridor, are supportable given market and consumer demands, and are feasible, viable and engaging. Assets were analyzed regarding their potential to attract new businesses and encourage the retention and expansion of existing businesses, creating new jobs that are accessible to Corridor residents.

Key Corridor Assets

Building and Heavy Manufacturing Infrastructure

- *Major Rail Infrastructure*

Oriented towards the Canadian Pacific Railway connecting to the Port of Milwaukee, points south (via Chicago) and northwest (Minneapolis-St. Paul), the 30th St. Industrial Corridor was designed to facilitate easy and reliable transport of materials into and value-added products out of the Corridor.



- *Large Stock of Industrial Facilities*

Existing facilities adjacent to the rail line were designed for industrial purposes and include a wide range of configurations. Today, this large stock is in varying states of condition, and generally requires upgrades and reinvestment to accommodate modern production layouts and operational efficiencies. The 30th St. Industrial Corridor Corporation (30th St. ICC) has created a database of available properties and sites in the Corridor, to help interested companies find locations suitable for their intended operations.

- *Large and Small Industrial Sites*

Parcels along the rail line are particularly diverse in size, ranging from massive industrial complexes (e.g. the Tower Automotive site) to narrow parcels which afforded businesses the minimum rail frontage necessary for freight rail access. The small parcels challenge redevelopment for medium-to large job generators, but also may help in the attraction of smaller enterprises and startup businesses looking for a small, affordable spot from which to grow.

- *Water*

The industries that once dominated the Corridor included water-intensive uses such as tanneries, foundries and breweries. Access to this capacity and the abundant resources of Lake Michigan remain. Combined with technological advances that bring concomitantly efficient uses, water retains a place of prominence in the corridor's asset hierarchy.

Residential Building Stock

The majority of the housing in the 30th St. Industrial Corridor was designed to accommodate the workforce of a dense, thriving industrial community. The stock largely consists of well-built urban housing in traditional neighborhoods, designed for working-class families earning good wages. Today, these many and variegated neighborhoods remain diverse in nature, some in need of extensive rehab and investment, others viably middle class.

Potential Workforce

The dense population surrounding the industrial corridor includes a significant percentage of un- or under-employed workers. The concentrated population of underemployed, coupled with the area's low median age creates a large pool of people looking for work, and a large market for targeted workplace skills training opportunities. Expanding major transit routes to and through the Corridor would help significantly to mobilize the workforce, largely removing transportation as an obstacle to workforce participation.

Workforce Training Resources

An institutional infrastructure striving to train workers for local opportunities and grow area business exists within the Corridor and City. This infrastructure can be reinvigorated through focused training in fields for which the Corridor is being actively marketed.

Workforce resources active in the Corridor include the Milwaukee Area Workforce Investment Board, Inc., its' Youth Services Center, the New Hope Project, and the Milwaukee

Job Center North. Specialized skills-training efforts could build off of the 30th St. Industrial Corridor Employment Training Pilot, whose partners include businesses, Business Improvement District (BID) #37, MATC, the Milwaukee Area Workforce Development Board, and City leadership. These centers can help prepare a new generation of workers whose entry-level skills are closely aligned with the needs of businesses.

Business Development Initiatives and Incubators

Business development initiatives include the Milwaukee Technology Incubator Center, an incubator being developed by DRS, Milwaukee Department of City Development, the Northwest Side Community Development Center, and 30th St. ICC, to provide state of the art facilities to accommodate 5-7 technology-driven start-up businesses at a time.

Existing Businesses and Corporate Presence

While many industries and their jobs have left the Corridor en masse over the past few decades, the decline in manufacturing is most closely noted. The fact is that a strong corporate presence remains, which can provide a network for attracting new businesses, research and development interests, and other significant investors. Today's anchors include Master Lock, Eaton Corp., DRS Power and Technologies, Miller Brewing Company, and Harley-Davidson Motor Company. These companies have remained strong by realigning themselves to compete in the global economy, at the same time demonstrating the 30th St. Industrial Corridor remains a viable location for product development and manufacturing.

Regional Assets

A wide range of regional assets were identified and analyzed during the Milwaukee 7's regional asset and opportunity analysis and strategy development. Of these regional strengths, those which correlate most strongly with the unique issues and assets of the 30th St. Industrial Corridor are identified below. Building upon the Corridor's many assets, described above, these regional assets can be leveraged to catalyze job creation, business development, and economic replacement in the Corridor.

Center of Production for the Global Market

The Milwaukee Metro area is often noted as a national leader in its concentration of Fortune 500 Headquarters for its size. An additional point of distinction for Milwaukee is that many of its global corporations also have major manufacturing and product development centers in the region, in close proximity to their corporate headquarters.

These major production centers concentrate a great amount of jobs, expertise, research and development skill close to their company headquarters, and are supported by—and themselves support—a regional network of suppliers and distributors in a mutually-beneficial relationship. In addition, these major production centers are complimented by a hundreds of smaller manufacturers located throughout the region that enjoy access to the deep, well-rooted network of suppliers and distributors strategically located around the region. The Milwaukee area's host of supplier chains supports a broad range of value-added production industries.

In addition, the applied R&D which occurs within Milwaukee area businesses generates potentially underutilized corporate intellectual property (IP), which can be leveraged to a greater degree by entrepreneurs and local universities, creating new

commercialization opportunities.

Great Lakes' Proximity and Freight Accessibility

The region is directly connected to global inputs as well as export markets through its' connections to multimodal freight transportation facilities: shipping throughout the Great Lakes states and provinces and to the Atlantic via the Port of Milwaukee; air freight around the world through General Mitchell International Airport; truck transport across North America through the region's connections to the interstate highway systems; and freight rail across the country via the region's rail network.

In addition to providing transportation routes, the region's location on the Great Lakes facilitates the growth of industry, easing company concerns over water availability and cost, and spurs development of both water-related (e.g. metering; conservation; filtration) and water-intensive (e.g. heavy manufacturing; brewing) industries. The Great Lakes also enhance the local quality of life that helps attract new and expanding businesses—with many options as to where they locate—to the Milwaukee area.

Skilled Workforce and Wealth of Higher-Education Institutions

The area's major corporate employers with research, product development, and manufacturing facilities concentrate a skilled workforce and engineering capacity in the region. This well-established talent includes a significant baby-boomer generation population, the expertise and resources of which can be leveraged to create a resourceful new group of entrepreneurs as these boomers exit the conventional labor force. At the other end of the labor pool, the next generation of researchers and engineers is being educated at the region's universities and technical schools. These educational

institutions are actively investing in growing their research and engineering capacities.

Diverse Manufacturing within the Region

The region has maintained some of its older manufacturing base through these companies' continued investment in their facilities. These traditional core manufacturing companies have been joined by a range of newer companies oriented toward emerging markets; products range from biomedical machines to sophisticated electronics systems. The result is a strong regional manufacturing base with a deep pool of very diverse, yet often complementary, product lines.

Local Companies thriving in the Clean & Green Economy

Many of the major globally-oriented, manufacturing and production companies of the Milwaukee region have an acute market interest—or are wholly-oriented around—the emerging Clean & Green Economy. Clean & Green encompasses a broad, innovative growth economy focused on developing goods and services with reduced economic and environmental costs. In general, Clean & Green production is more efficient, inputs and outputs are more environmentally-benign, and products are higher-value relative to traditional products.

The Clean & Green Economy has developed in a global marketplace. It is sparked by innovation, pushed forward by consumers, and pulled ahead by public policy and government demand.

More than a trend, Clean & Green represents a wholly new economic paradigm focused on more inclusive accounting of the economic and environmental cost of product inputs and operations, producing innovate and efficient products that

make sound business sense for both the company and the consumer. The 30th St. Industrial Corridor is located in the midst of major Clean & Green corporations that are helping drive this economy, including Rockwell Automation, Johnson Controls, Modine, SC Johnson, and Johnson-Diversey. These companies' market strategies' align with, and seek to further expand, the growing Clean & Green demand. For example, Johnson Controls' research, development, and production of green building systems and energy efficient systems are designed to generate value-added products and services which have the potential to reduce their customers operational costs—and pollution—over the lifetime of the product.

The region's participation in the Clean & Green Economy is facilitated by the vast natural resources in and adjacent to the region, such as biomass and freshwater; and the region's role as a hub of value-added production and expertise.

By aligning under a Clean & Green strategy, the City may position institutions and programs for new funding opportunities such as the Green Jobs Act, a federal law signed in 2007 that will distribute \$125 million annually for job training programs focused on creating “green pathways out of poverty.” It has been suggested by the incoming federal administration that an increased emphasis will be placed on creating a Green Federal Job Corps. Included as an asset above, the City has the infrastructure of workforce training resources from which new programs can be launched. The City could also benefit from targeted training at federal facilities such as the Milwaukee Job Corps Center now under development.

What is the Big Opportunity Here?



The Clean & Green Economy is just beginning to penetrate deep into the supply chains and production systems of many industries. It encapsulates an ever-broadening range of systems, products, and services delivering superior performance with lower costs and minimized environmental impacts.

The economy offers opportunities for early-mover advantages for businesses and regions focused on its tremendous potential for innovation and growth. Cleaner, greener technologies generate new companies and often lead to the creation of entirely new industries—such as hybrid batteries, or wind turbine production. Clean, green technologies also afford existing companies the opportunity to re-tool their production, increase their efficiency, and develop new competitive advantages.

Growing concern among businesses regarding energy and transportation costs, resource limits, and operational efficiency, and a shift in consumer mindset toward the long-term operational costs and the environmental impact of

goods and services, will propel this economy forward. Despite a slowing economy, Clean & Green technologies continue to be capture investor interest at remarkable rates; one indicator is the estimated 70 percent increase in venture capital investment in clean energy in 2007 over to the previous year—reaching \$2.7 billion in 2007 .

The region's potential for engagement in the Clean & Green Economy is already recognized by Milwaukee's many global corporations that have addressed these market shifts by reorienting their businesses strategies toward Clean & Green innovation. Many are already global leaders in their fields.

Local leadership has also begun articulating Clean & Green initiatives and vision. For example, Mayor Barrett created the Milwaukee Office of Sustainability, and the City is actively working to increase the efficiency of its buildings and auto fleet, purchasing decisions which grow local demand for green technologies. Additionally, the Milwaukee 7 has identified niches of the Clean and Green Economy for which the region is particularly well-positioned to lead, such as freshwater technology. The Clean & Green Economy aligns with the Milwaukee 7's goals of growing innovation, commercialization, and the region's competitiveness in the global economy.

^[1] *Clean Energy Trends 2008. Clean Edge, Inc.*

What does this mean for the 30th St. Corridor and the City?

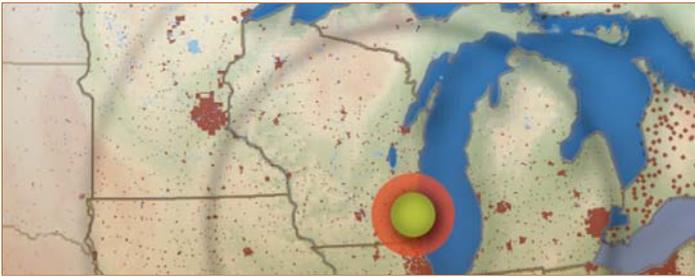
The 30th St. Industrial Corridor presents a strategic location to focus City initiatives to capture emerging economic and employment opportunities for the benefit of Milwaukee’s residents. To this end, the Corridor can be positioned as a regional centerpoint for the emerging Clean & Green Economy. By clearly defining and communicating the Corridor’s assets in a way that differentiates it from competing business sites and aligns it with the needs and objectives of the Clean & Green Economy, the City has a strong opportunity to overcome the numerable challenges impeding comprehensive, wholly market-driven redevelopment of the Corridor.

Factors aligning the Corridor as an ideal focus for the region’s involvement in this economy include:

- *Freight infrastructure and accessibility*— multi-modal connections to regional markets via existing rail lines, roadways, and Port facilities. These connections afford businesses flexibility as to how they ship inputs to and products from their facilities—an asset which is vital to maintaining relatively stable costs of production, given volatile fuel costs, and a key consideration for companies working to reduce their environmental impact and position themselves for a future that could include more stringent regulations or taxes on corporate greenhouse gas emissions.
- *Existing infrastructure*— underutilized sites and properties which are piped, paved, watered, and within existing service areas. Reinvesting in these sites must be comparable in cost to developing outlying “green

spaces”; the City is already working to this end by its work in Brownfield remediation and site assembly. Utilizing existing infrastructure aligns well with the goals of “triple bottom line” companies and other Clean & Green businesses that are working to improve their company’s economic, social and environmental “bottom line”.

- *Concentrated workforce*— the young, underemployed labor force surrounding the Corridor is necessary to support manufacturing; the urban workforce also supports green business consideration for locating in live-work neighborhoods. The Corridor’s neighborhoods were designed for middle-class families and are connected to the broader City by public transport.
- *Workers resources*— Regions that rapidly pursue new Clean & Green industries such as Oakland, CA, and Trenton, NJ, mentioned below, have found a need to develop new skill sets amongst their labor force—a need that will likely be particularly acute in the Corridor, given Corridor neighborhood’s generally high rates of unemployment and low levels of educational attainment. Fortunately, the Corridor is well served by worker resource centers and successful models of employee training tailored to individual business’ needs; these resources can be leveraged to meet new employer demands.
- *Proximity to educational institutions*— providing education, expertise, and driving research in engineering and advanced manufacturing.
- *Corporate anchors*— concentrating expertise, market strength, supply chain influence, and capital, and driving the Clean & Green Economy by developing innovative, efficient, and environmentally-responsible products.



How do we position Milwaukee for these opportunities? What is being done elsewhere?

Local and regional governments, public and private companies and economic development organizations, amongst other entities, are actively organizing and reorganizing their strategies in line with emerging Clean & Green economic opportunities. Here in the United States, industry-driving corporations, as well as local units of governments— both often more adaptive than state and federal government in addressing emerging economies—are leading the way in grasping emerging Clean & Green opportunities.

Examples of activities at the local level include:

- San Francisco’s Clean Technology Advisory Council attracts high-skill, high-wage jobs in the clean technology sector to the City; this initiative was modeled after the City’s biotechnology initiative.
- A pilot of Oakland’s Green Jobs Corps, initiated by local organizations and funded by the City, is underway to train workers in the green economy and demonstrate that green economic development is a way out of poverty.

- The Trenton, NJ Green Initiative includes several employment-related programs, including the Pilot Green Collar Careers Program, the Energy Smart Home Inspection and Maintenance Initiative, the Green Roof Initiative, and the School Bus Biodiesel Initiative, all of which provide skills-training and apprenticeship learning opportunities to prepare residents for “green collar” opportunities.
- The Twin Cities have identified opportunities to grow green building, transportation and renewable energy sectors to increase jobs, products and profits.
- San Jose, CA announced the City’s Green Vision in 2007, which outlines ten goals to be pursued for the year 2023, including the creation of 25,000 Clean Tech jobs, developing San Jose as the “World Center of Clean Tech Innovation”.
- The 18-county “New North” region of northeastern Wisconsin promotes its unique local combination of wind energy manufacturing advantages, including superior supplier potential, existing markets, an expanding economy, excellent workforce, transportation assets, and strong natural wind resources.
- Wisconsin’s BioAg Gateway, a specialized R&D and commercialization business park located in Madison, is wholly oriented towards capitalizing on city, state and regional Bio-Agricultural assets. The Gateway is fueled by the Midwest BioLink Incubator.

- The Milwaukee 7 is actively developing the region's strengths in freshwater technology. Working groups of public and private expertise have been organized around the topics such as freshwater technology and marketing; M7 is collaborating with UWM on advancing educational facilities, and a Water Industry Specialist has been hired to serve as a liaison for freshwater industry-related economic development.
- Cities are creating departments similar to Milwaukee's Office of Sustainability to increase the efficiency and sustainability of City operations.
- Chicago Mayor Richard Daley pursued development of a local solar industry by offering incentives to solar companies and bolstering local market demand for their products through city procurement policies.

The initiatives, programs, and policies noted above demonstrate that cities and regions of varying sizes and diverse strengths are actively pursuing Clean & Green opportunities. These examples provide assurance that the Clean & Green Economy is the way of the future. Much like the recently-developed "dot-com" and biotechnology economies, the Clean & Green Economy has quickly infiltrated the daily operations and business strategies of companies around the world. The economy has initiated entirely new ways of thinking about business, and has left

industries with an ever-increasing imperative to either get on-board with the changing marketplace or get left behind.

These analogies reiterate the importance of moving quickly to discern local advantages, align policies and initiatives, and establish a wellspring of expertise in a particular industry.

Given the breadth of the Clean & Green Economy, governments and organizations have, much like businesses, targeted particular niches of the vast and ever-expanding economy, focusing efforts and investments on the most appropriate Clean & Green opportunities for their community. Some communities have also directed efforts to targeted geographic areas of the community to create a critical mass of Clean & Green economic activity.

Positioning Milwaukee in the Clean & Green Economy can be pursued through a focused effort on the 30th St. Industrial Corridor. The City's goals of creating jobs, ensuring jobs are accessible to underemployed residents of the central city, revitalizing underutilized industrial sites, and aligning the area's assets with emerging economic opportunities can all be commonly pursued through development of a Great Lakes Green Industry Complex in the 30th St. Industrial Corridor.

Positioning Milwaukee in the Clean & Green Economy

To take full advantage of the economic opportunities afforded by the rapidly evolving Clean & Green Economy and garner early-mover advantages, Milwaukee must quickly pursue an action-oriented agenda aimed at leveraging the area's existing assets. **The agenda includes:**

POSITIONING AGENDA

CREATE A CENTERPOINT

- To gain a foothold in this broad economy and focus a range of efforts and initiatives, Milwaukee should focus its growth initiatives on a centerpoint. The 30th St. Corridor, for all the reasons cited above, provides a strategic location that can help generate momentum within the City and attention from throughout the region, solidifying the idea that the 30th St. Corridor of Milwaukee—a **Great Lakes Green Industry Complex**—is a great place to develop an innovative Clean & Green business.

BE A DEMAND LEADER

- The City can pursue its sustainability goals in tandem with its economic goals by setting high standards for the City's own energy efficiency, renewable energy use, and environmentally-preferable procurement policies. These actions will grow local demand for Clean & Green technologies and products, help start-up companies build their market presence and expand to serve the global export market. The City can also advance its leadership position in supporting Clean & Green market incentives, industry development, and sustainability initiatives at the state and regional levels.

CREATE A MARKET IDENTITY

- A key role of the public sector in positioning Milwaukee will be to broadcast a clear and well-supported market identity for the 30th St. Corridor, building industry familiarity and support through the region for the City's goals. A market identity, such as the **Great Lakes Green Industry Complex**, should communicate the type of businesses developing within the Corridor and the type of public initiatives and goals being actively pursued.

BUILD INNOVATION CAPACITY

- The public and private sectors must work together to link research and development efforts, focus training and education initiatives where private-sector demand lies, retain intellectual property generated locally, and increase commercialization.

LEVERAGE GLOBAL CORPORATE LEADERSHIP

- The Milwaukee area is rich in corporate knowledge, global market experience, and product innovation. The area's major corporations are also at the center of business networks, with significant impact on the regional supply chain. Leveraging both the expertise and influence of these corporations can help grow new employers and the economy.

Positioning Milwaukee in the Clean & Green Economy:

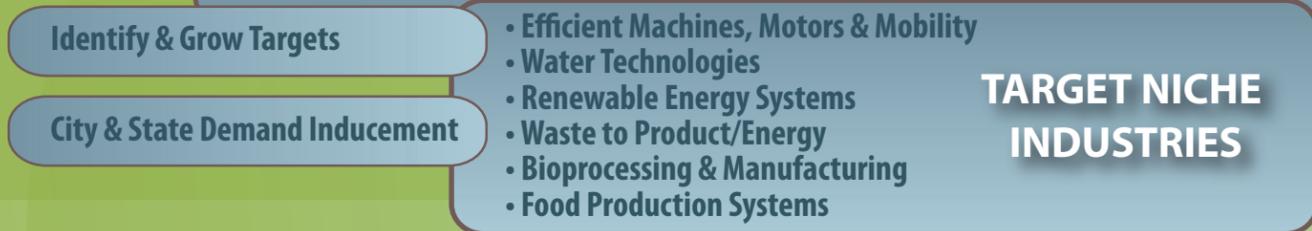
A Strategic Economic Framework



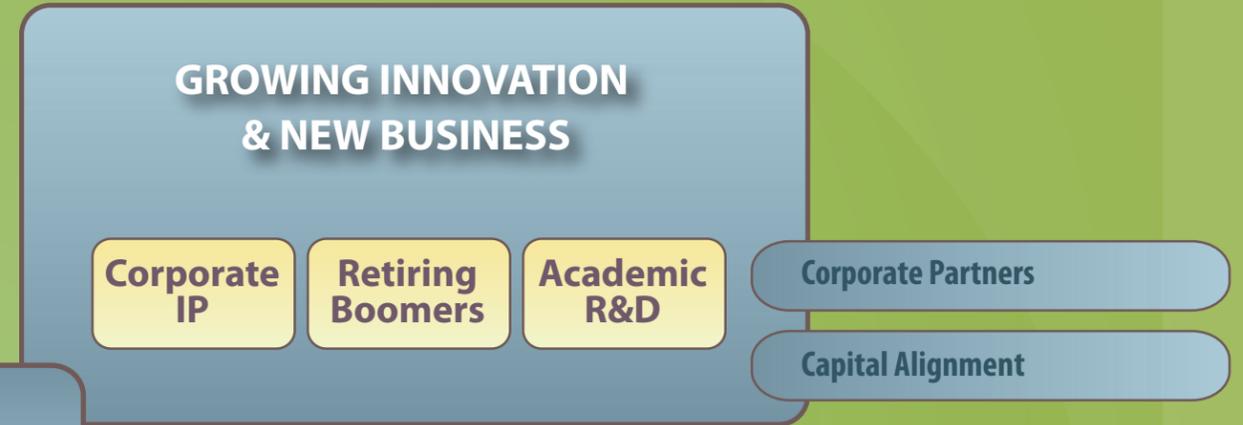
As opportunities for positioning Milwaukee in the Clean & Green Economy were explored, the structure of a strategic economic framework emerged. The framework outlines a comprehensive economic vision for restructuring and revitalizing the 30th St. Industrial Corridor as a Great Lakes Green Industry Complex. It is a way to begin thinking about the role of individual efforts, initiatives, and organizations in the Context of a greater plan for a restructured and revitalized Corridor providing jobs and opportunity for residents. This preliminary framework is the focus of the remainder of this document and is outlined in the graphic below.

WORKING DRAFT

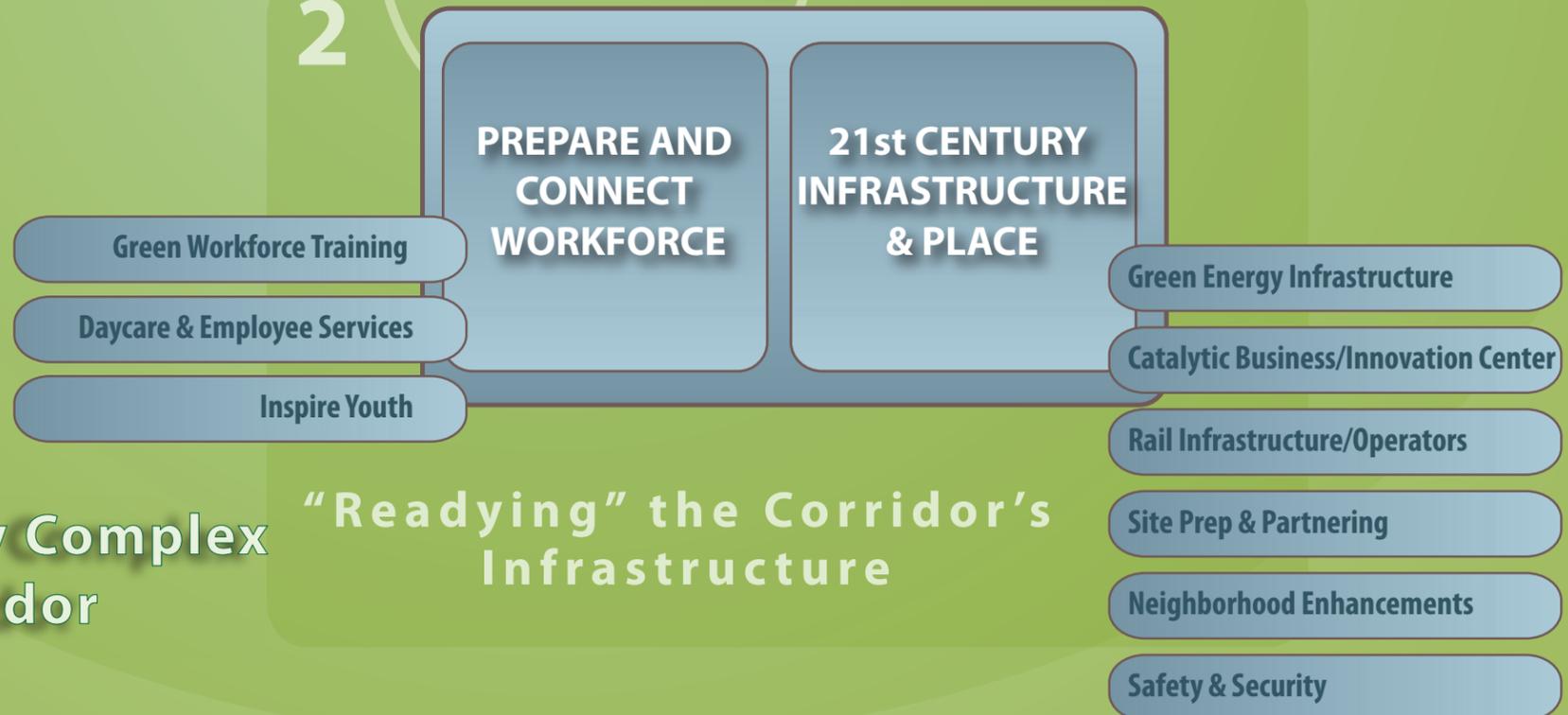
1 Green Manufacturing Center



3 Build Innovation Capacity



2



"Readying" the Corridor's Infrastructure



**Great Lakes Green Industry Complex
30th Street Industrial Corridor**

Create a Green Manufacturing Center



Positioning the 30th St. Corridor to Create Jobs

To generate momentum for job creation and industry development in the Corridor, the City can establish a Green Manufacturing Center in the Corridor— The **Great Lakes' Green Industry Complex**. Rooted in the existing underutilized industrial lands, such a Center would target green manufacturers, green product suppliers that complement regional supply chains, and triple bottom line companies.

Focusing economic development efforts on a Great Lakes Green Industry Complex could attract businesses, entrepreneurs, and capital from throughout the region, and help grow a critical mass of innovative activities under an energizing, tangible goal. It transforms the revitalization of the 30th St. Industrial Corridor from a local economic development initiative into a national model for central city economic alignment and national center for innovative, economy-driving manufacturing.

Establishing a Great Lakes Green Industry Complex in the 30th St. Industrial Corridor would help provide vision and momentum to retool the Corridor's infrastructure and workforce to not only prepare for, but take a leadership position in, the 21st Century Economy.

Initial opportunities that the City should explore, which could help establish a Green Manufacturing Center, include:

Green Certification

Green Certification would serve as a marketing tool and an assurance to consumers that a particular product, component, or service was made or processed under established environmental and social parameters. The Certification could take the form of a Wisconsin Triple Bottom Line Seal—a designation initiated by the State, designed with Milwaukee's 30th St. Corridor as a pilot project, that could ultimately be replicated in other urban Brownfield areas of the State. For the State, a Wisconsin Triple Bottom Line Seal, with clear parameters addressing environmental and social sustainability, designed to resonate with consumers, could serve as an economic development initiative.

In absence of State support, the City could work with one of the leading independent organizations that certify products and businesses as environmentally, socially, and economically sustainable.

The intent behind Green Certification is two-fold: to communicate to consumers that a manufacturer is committed to clear triple bottom line parameters, raising their interest in a product without leaving them feeling green-washed; and, to advertise the opportunity for sustainable production that businesses locating in the 30th St. Corridor enjoy, growing demand for additional industrial development in the Corridor.

Incentives

Attracting companies and creating jobs in the Corridor requires that the cost of locating and operating in the Corridor be comparable to other sites, particularly sprawling greenfield sites in undeveloped areas. While greenfield sites are contradictory to most tenets of environmentally-responsible production, the costs associated with Brownfields deter their redevelopment. Site assembly and remediation and

individual incentives alone appear insufficient to get the Corridor back on its feet and generating investment, jobs, and tax base. The conditions and challenges unique to the Corridor necessitate a comprehensive set of incentives that could include:

- Subsidies in cases where redevelopment or reuse of sites is not cost-effective compared to alternatives.
- Reliable energy costs; a power purchase agreement could be pursued through WE Energies which would expand renewable energy generation and help manufacturers avoid the volatile cost of energy.
- Renewable Energy Tax Credits, which may be available for renewable energy generated on-site. The City could also explore creating a Corridor-wide program that would facilitate companies' buying and selling of carbon credits, likely on the Chicago Climate Exchange, and would create a competitive advantage for Corridor businesses in transitioning to a federal, economy-wide carbon cap-and-trade program, discussed as a priority of the incoming federal administration.
- Tax Increment Financing (TIF), facilitated by the nine TIF districts currently active in the Corridor.
- Enterprise Zone or other Special Designation Credits.
- Income Tax Credits.
- Foreign Trade Zone status.

Identify & Grow Targets

Working regionally and with industry experts, the City can identify the most appropriate target industries with the potential to attract complementary industries to the Great Lakes Green Industry Complex, to strengthen existing area

supply chain and production strengths, and leverage incentives to generate the greatest return in the form of economic growth and new job creation.

Companies that stand to benefit most significantly through locating in the Great Lakes Green Industry Complex would include those manufacturers and supply chains most directly affected by consumer or end-user demand for Clean & Green products and processes; those companies that are strongly affected by rising costs of transportation and face competition for operational efficiency, and those companies that have adopted a triple bottom line approach to business, incorporating environmental, social, and economic considerations to business decisions.

Niche target industries that should be considered include:

- *Efficient Machines, Motors & Mobility*
- *Water Technologies;*
- *Renewable Energy Systems;*
- *Waste to Product/Energy;*
- *Bioprocessing & Manufacturing;*
- *Food Production Processing Systems*

Government Greening and Demand Inducement

Government can grow demand for greener products and processes through policymaking and through administrative actions, such as environmentally-preferable purchasing. The City is in a strong position to increase the demand for locally-produced, Clean & Green products by aligning the City's procurement strategies toward local, Clean & Green manufacturers, which would help grow their local market base and reduce unit costs of production for these companies, increasing their attractiveness to consumers.

“Readying” the Corridor’s Infrastructure



The Corridor’s strongest assets include its existing underutilized infrastructure and its existing underemployed workforce. Both assets will need to be retooled and better equipped to meet the demands of the 21st Century workplace.

Prepare and Connect Workforce

Green Workforce Training

The Corridor currently benefits from the social infrastructure of workforce development initiatives which help workers prepare for and attain low- to moderate-skill employment. This infrastructure can be leveraged to develop and implement targeted training for green-collar jobs in emerging industries. Existing initiatives could be reenergized around the opportunities available at a Great Lakes Green Industry Complex. A focus on green jobs could also provide new funding opportunities through the federal government and other sources.

Programs could be developed with local educational organizations to provide targeted training at specific companies (e.g. MATC’s program designed for—and offered at—Masterlock’s manufacturing facilities). More general soft-skill workplace training could be supported by workforce development & training facilities within the Corridor.

Daycare & Employee Services

Worker services which better enable the workforce to prepare

for and partake in emerging employment opportunities will include certified day cares with well-aligned hours, dry cleaning/laundry facilities, banks, and other institutions that are key components of live-work communities. Businesses interested in the Corridor will expect such services will be made available, but they may currently be lacking throughout parts of the Corridor. The development of these complementary industries would also broaden the reach of economic growth beyond the industrial areas, to benefit a broader segment of the community.

Inspire Youth

Too often, youth growing up within the Corridor do not see a clear path for their entry into the skilled labor force given the unemployment plaguing their community. Revitalizing the Corridor neighborhoods by generating jobs and income provides an incentive in itself, enabling and inspiring youth to look toward their futures. Targeted school and community programs exist throughout the Corridor and can be reoriented around the opportunities emerging from the Clean & Green Economy.

In addition, there may be room for creation of a Life Venture Center, which would include facilities, training and programming designed to expose and engage youths and adults in promising job opportunities. The Life Venture Center would help catalyze job skills training and entrepreneurial business planning. The Center would be directly integrated with neighborhoods, accessible and proximate to homes, schools, day care facilities, and neighborhood business. Partnerships could be generated with institutions with complementary missions, such as Discovery World. By creating a clear ladder out of poverty, initiatives focused on the 30th St. Corridor will have a positive economic and social effect throughout the City and region.

21st Century Infrastructure & Place

Green Energy Infrastructure

There is presently no strong industrial power distribution network throughout the Corridor. Power distribution will need to be upgraded to provide adequate reliable energy for modern manufacturing facilities. The scale of these upgrades presents the opportunity to implement advanced, efficient power generation and distribution facilities, create redundant, high-quality power networks, and co-generate renewable power to meet modern Clean & Green business demands.

Efficient use of renewable energy use is an integral part of green production and may also secure tax credits or carbon credits for energy upgrades.

Other assets identified above contribute to a comprehensive green infrastructure, including the diverse transportation options available to Corridor businesses, allowing them to minimize demand for non-renewable transportation fuels; the existing underutilized or unused utility infrastructure; and the live-work nature of the community. Furthermore, the Corridor's location within the Chicago-Milwaukee Megacity—home to a population of more than 12 million, robust regional supply chains, and concentrated production facilities—all work together to locate production within a major market and to minimize transportation demand throughout the entire production chain.

Catalytic Business/Innovation Center

Clean & Green innovation and growth comes from small businesses and entrepreneurs as well as from corporations with major product development and research centers. The City has an opportunity to provide start-up entrepreneurs affordable workspace and a collaborative environment, attract venture capital and industry interest, and demonstrate a long-term public commitment to the Corridor as a center of innovation by creating a catalytic business incubator in the Corridor.

This facility could take the form of a mixed-use center of lab and office space, business services, housing, and restaurants—an urban neighborhood technology center. The center would need to be designed to arrange uses in a catalytic form that would focus the Corridor's entrepreneurial energy. The goal could be to provide start-ups and corporate spin-offs—the space, resources, and services necessary to grow into viable, job-generating businesses.

The facility could develop into a place which venture capitalists recognize, and where corporations find markets for their underutilized IP. As companies grow, organizations such as the 30th St. Industrial Corridor Corporation could help them find appropriate locations elsewhere within the Corridor.



Rail Infrastructure/Operators

Reinvestment within the 30th St. Corridor will lead to increased demand for rail service on the adjacent rail line and at key transfer stations. The City and related agencies must work with rail owners and operators to be able to ensure capacity and dedicated service. Ensuring rail service is critical to attracting investment given that rail is one of the area's strongest assets for attracting manufacturers, and one which differentiates it from outlying business parks which depend more exclusively on truck transport. Rail service allows large quantities of Clean & Green production inputs, such as biomass and resins, to reach facilities reliably and efficiently, and facilitates delivery of products to global markets. As a major asset in the 30th St. Corridor, the City must work to ensure the rail is upgraded to meet the needs of today's industries.

Site Prep & Partnering

The City's work in acquiring and assembling sites and obtaining funds for remediation is an imperative first step toward redevelopment. Bringing the City's vision for the 30th St. Corridor redevelopment to life will also necessitate partnering with developers of private sites to communicate the City's vision for the Corridor. Broadcasting a clear message and market identity for the area will help communicate this vision and get developers and land-owners thinking about how they can leverage this vision and benefit from the opportunities presented by this new economy.

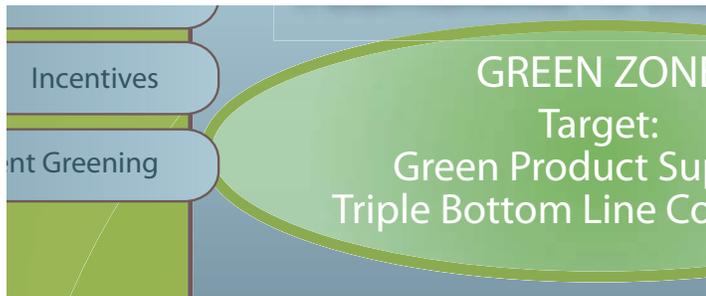
Neighborhood Enhancements

Public and private partnerships will help foster a concentrated effort for neighborhood enhancements throughout the Corridor. The City can target businesses to help in this effort by explaining their vital role in the Corridor's future and demonstrating that comprehensive improvements to the neighborhood is in their self-interest. Much work has been done, and more is in the pipeline to this end, as a result of the efforts of neighborhood groups, business associations, City projects and funding, the 30th St. ICC, and complementary organizations. Funding mechanisms including TIF, BID, and local, state, and federal grant and loan programs can help individual property owners improve their properties and help business districts create more cohesive, positive images.

Safety & Security

Ensuring the safety of workers and visitors and the security of operations is also integral to attracting and retaining investment. Because the 30th St. Corridor endures a high rate of crime relative to many other areas of the City and an often negative public perception, the City and Police Department must work to visibly increase the area's safety and earn the public's confidence that measurable improvements have been and continue to be made. The 30th St. ICC's collaborative projects with businesses to fund security improvements also provides a model for targeted improvements.

Build Innovation Capacity



Growing Innovation & New Business

Rebuilding the 30th St. Industrial Corridor to its former might, a wellspring of innovative production and a source of jobs to support the local workforce, is an initiative that residents, the regional community, the business community, area institutions, policy-makers and elected leaders can all get behind. Growing innovation, developing regional market strengths, generating jobs, building the tax base, and aligning Milwaukee's economy around emerging markets and new opportunities are in the self-interest of each of these parties and provide clear benefits to the region.

To grow innovation and business, assets that will be particularly beneficial include:

Academic R&D

Milwaukee's concentration of academic research and expertise, particularly in engineering and product design, will complement corporate R&D and help fuel innovation.

Corporate Intellectual Property (IP)

Corporations often develop intellectual property that often goes unused given their businesses particular focus or limited resources, but which could have significant value in different hands. The concentration of major Clean & Green corporations in the area suggests there may be a substantial opportunity to link unused IP with appropriate local businesses.

Retiring Boomers

The baby-boomer generation has begun to reach retirement age. Possessing vast knowledge of industry and business, they are not all interested in dropping out of the business world entirely. This population brings with them extensive business networks, financial resources, and the flexibility of not being committed to a conventional work schedule. Milwaukee has the opportunity to galvanize the boomers' knowledge and resources around engaging and energizing initiatives through which they can explore new business opportunities and entrepreneurial ventures, grow the economy, and positively impact the community.

These leveragable assets reinforce the catalytic potential of a Clean & Green business incubator. Providing a center where entrepreneurs and investors interested in the Clean & Green Economy can go to share knowledge, strike deals, and find the resources they need to get their businesses growing is a fundamental opportunity for Milwaukee to grow its local economy.

Corporate Partners

Partnering corporate leaders with academics and policymakers around collaborative opportunities to create a pool of expertise could provide a forum for exploring ideas and concepts, fostering the transfer of intellectual property, building momentum for burgeoning industries, and increasing recognition of the region's substantial participation in the Clean & Green Economy.

Capital Alignment

Because attracting capital investment to entrepreneurial businesses is a key component in growing the local innovation economy, the City must strive to grow these networks and increasing their accessibility to entrepreneurs.

Fortunately, the City has a strong foundation in that finance, like advanced manufacturing, is a strong sector of the Milwaukee economy. Opportunities to leverage resources and grow financial opportunities for new businesses include developing a Clean & Green Angel Network that would target these emerging technologies; broadcasting a market identify that will attract interest from national and international venture capitalists, and targeting individual investors with connections to the Milwaukee area.

Developing these funding opportunities for new businesses would be fostered by the creation of a business incubation center that would attract these potential partners and develop interest in aligning capital behind Milwaukee's emerging Clean & Green businesses.

Partners & Roles

Job creation, business growth, and comprehensive economic replacement of the 30th St. Industrial Corridor economy will not be easy. As the opportunities outlined above suggest, it will necessitate the collaborative efforts of a variety of diverse public and private sector entities, agencies, and organizations. The necessity of these efforts are not exclusive to repositioning the Corridor as the Great Lakes Green Industry Complex, but are an unavoidable reality given decades of disinvestment, economic decline and property deterioration, Brownfield contamination, and a pervasively underemployed and undertrained residential workforce base.

Partnership-building across entities will be an essential first and ongoing task toward economic replacement in the 30th St. Industrial Corridor. While no single entity could have the

capacity or resources to achieve this alone, it will need a champion in the City to galvanize energy, resources, and push the new economy forward.

Given the scale of this task, it is encouraging to look toward collaborative models that are productively working to align the local economy with emerging global demands. The Milwaukee 7's work to establish the region as the global capital for freshwater research, economic development and education demonstrates the potential energy of these collaborative efforts—as well as the complexity and size of the task, reiterating the need for focused efforts that are well-aligned with existing local strengths. The Milwaukee 7 freshwater initiative involves many of the same partners identified for potential involvement in development of the Great Lakes Industry Complex.

The Milwaukee 7 has identified freshwater technology as a focused market in which the region has concentrated assets and strong potential—one that is also a large component of the Clean & Green Economy. The group is leveraging local institutional expertise through its creation of an industry-led Water Council, and has hired a part-time Industry Specialist to serve as a focal point for industry development and collaboration.

To tackle its comprehensive agenda, the Council separated into three working groups:

The **Research/Emerging Technologies Committee** identifies opportunities for product development, cross-sector networking, and funding;

The **Marketing/Branding Committee** markets regional resources and researches economic development models (e.g. Silicon Valley);

The **Education/Outreach Committee** advances mechanisms for connecting academic and industry to increase product development and commercialization.



PARTNERS AND ROLES

Economic Replacement Initiative:
Positioning Milwaukee in the
Clean and Green Economy

- Jobs
- New Businesses
- Workforce Alignment

STATE DEPARTMENTS:
DOA
OEI
DOC

**DEPARTMENT OF
CITY DEVELOPMENT**

- Prepare land
- Planning
- Develop partnerships – land owners and developers
- On the ground deal making

GOVERNOR'S OFFICE

- Expertise
- Tax incentives
- Policy
- Targeted infrastructure technology investment
- Business attraction strategy

**MILWAUKEE OFFICE
OF SUSTAINABILITY**

- Advocacy policy / government greening

MAYOR'S OFFICE

- Leadership and message broadcasting

**30TH STREET
INDUSTRIAL
CORRIDOR
CORPORATION**

- Corridor enhancements
- Business development

**NATIONAL
FOUNDATIONS**

**LOCAL
FOUNDATIONS**

- Partnerships, fund-raising and leadership

FEDERAL PARTNERS:

- DOE
- NSF
- USDA
- DOC
- EPA
- DOT
- Federal resources
- Federal labs
- Technology innovation grants

**ACADEMIC
INSTITUTIONS**

- Align targets with strengths
- Tech transfer
- Develop talent and attract research \$

**EXTERNAL
EXPERTISE**

- Economic positioning and connecting businesses
- Innovation and tech center development advising
- Third party vision mgmt

MILWAUKEE 7

- Business attraction, message broadcasting

**REGIONAL
CORPORATIONS**

- Advise
- Secure Alliance Involvement
- Target Suppliers

**NEIGHBORHOOD &
PUBLIC LEADERS**

- Ownership and connection to residents

**WORKFORCE
DEVELOPMENT**

- Preparing workforce for emerging economies

WORKING DRAFT



**Great Lakes Green Industry Complex
30th Street Industrial Corridor**

Initial Implementation Plan

Work in Progress

	TACTIC		NEXT STEP	RESPONSIBILITY
Strategic Economic Framework				
*	Framework Vetting, Refinement Ownership	<ul style="list-style-type: none"> Gather, input, ownership, authorization and resources to advance Secure State partnerships and explore Summit 	<u>Set partner meetings</u> <ul style="list-style-type: none"> 30th Street Industrial Corridor Corporation Foundations / funders Corridor / neighborhood leaders Milwaukee 7 State leadership meetings 	
Green Manufacturing Center				
	Positioning to Create Jobs <ul style="list-style-type: none"> Green certification Incentives Government greening City and "demand" inducement 	<ul style="list-style-type: none"> Develop a Green Empowerment Zone Work with city, region, state to identify demand inducement strategies and legislation 	<ul style="list-style-type: none"> Corporate partnerships, corporate champions (e.g. ASBE) Investigate certification and TBL concepts with members of ASBE Align with Office of Sustainability initiatives Test concepts with state agencies 	
*	Target Niche Industries <ul style="list-style-type: none"> Identify targets 	<ul style="list-style-type: none"> Identify strategic targets within subsectors 	<ul style="list-style-type: none"> Begin Waste to Energy/Product analysis Support solar opportunity analysis proposal Assess specific regional targets and strategies 	
Build Innovation Capacity				
	Growing Innovation and New Businesses (IP, Boomers, Academic R&D) <ul style="list-style-type: none"> Corporate partners Entity Space and services 	<ul style="list-style-type: none"> Develop Corridor innovation strategy with key regional experts 	<ul style="list-style-type: none"> Call together corporate patents roundtable – Deere & Co. present model Call together Boomer roundtable (Manpower) Call together Academic R&D roundtable (Marquette, MSOE, UWM) 	
"Readying" the Corridor Infrastructure				
	Prepare and Connect Workforce <ul style="list-style-type: none"> Green workforce training Daycare and employee services 	<ul style="list-style-type: none"> Align potential workforce to emerging economies 		
*	21st Century Infrastructure and Place <ul style="list-style-type: none"> Green energy infrastructure 	<ul style="list-style-type: none"> Develop efficient, redundant, renewable energy plan Power purchasing agreements for Corridor 	<ul style="list-style-type: none"> Meet with WE Energies to discuss opportunity 	
*	Rail (to Port) infrastructure/operators <ul style="list-style-type: none"> Site prep and partnering Neighborhood enhancements Safety and security 	<ul style="list-style-type: none"> Identify rail upgrade opportunities with operators, experts Control key sites and develop partnership with owners and developers Identify critical enhancements to reshape Corridor 	<ul style="list-style-type: none"> Set meeting with operators, others 	
	Inspire Youth	<ul style="list-style-type: none"> Identify youth partnership strategy 	<ul style="list-style-type: none"> 	