

Sustainable Economic Development

Strategies for Cities and Regions

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PART ONE:

FRAMING AND CONTEXT

1 – Introduction

Introduction

This paper provides cities and regions with a comprehensive approach to economic development that puts sustainability front and center and helps them achieve the “win/win” of economic prosperity, social equity and environmental protection and restoration.

The authors are James Hurd Nixon and John Cleveland, both members of the Urban Sustainability Associates (USA) network. USA is a network of practitioners committed to supporting urban regions in the implementation of large scale sustainability solutions. Members of the USA network work in the areas of climate planning, sustainable economic development, sustainable transportation, large scale building retrofitting, green infrastructure, green workforce development, and community energy systems. (<http://usa.nupolis.com>)

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The authors have multiple decades of history of working at the intersection of economic development and sustainability. The emergence of global warming and climate change have accelerated the importance of this practice area, and have created opportunities and imperatives that will transform the practice of economic development over the coming decade. This practice framework is designed to support economic development professionals as they align their work with the sustainability imperative and sustainability practitioners as they engage with economic development.

Key Elements:

- **Framework.** A framework addressing what sustainable economic development is, why it matters, and how it is similar to and different from traditional economic development.
- **Initiatives.** A menu of sustainable economic development initiatives for cities/regions to choose from.
- **Strategic Process.** An approach to the development of sustainable economic development strategies for cities/regions that incorporates the initiatives.

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Much of the text in this presentation came directly from two papers:

- Sustainable Economic Development: Initiatives, Programs, and Strategies for Cities and Regions, written by James Hurd Nixon, published by Urban Sustainability Associates, and available at <http://usa.nupolis.com/public/iten/239139>.
- Climate Prosperity: A Framework for Sustainable Economic Development Strategies, written by James Hurd Nixon and Dr. Marc A. Weiss, Chairman and CEO, Global Urban Development, and Chair, Climate Prosperity Alliance, published by Global Urban Development, available at www.globalurban.org/Climate_Prosperty_A_Framework_for_Sustainable_Economic_Development_Strategies.pdf

Members of the Urban Sustainability Associates (USA) Network made significant contributions to this work, particularly:

- Pam Tate, President, CEO, Council for Adult and Experiential Learning (CAEL).
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- Pete Plastrik, President, Innovation Network for Communities
- Joseph J. Gross, President, CEO, Sustainable Systems Inc.

Other individuals we have learned a great deal from and who therefore contributed indirectly to this work, include:

- Belden Hull Daniels, President and CEO, Economic Innovation International
- L. Hunter Lovins, Founder and President, Natural Capital Solutions
- Larry Zinn, Chair, San Antonio Green Jobs Leadership Council
- Honorable Jane Brunner, President, Oakland City Council
- Joan Fitzgerald, author of [Emerald Cities – Urban Sustainability and Economic Development](#)

Key Points

We believe the emergence of a sustainable economy will lead to significant changes in local, regional and state economic development strategies and practices. This shift represents a great opportunity for cities and regions that want to take advantage of it. This report is designed to help cities and regions anticipate and get ahead of this opportunity curve. Our framework is based on the following premises:

- Sustainable economic development strategies generate substantial economic and employment growth and sustainable business and community development by demonstrating that innovation, efficiency, and conservation in the use and reuse of all natural and human resources are the best ways to increase jobs, incomes, productivity, and competitiveness.
- Sustainable economic development strategies are a highly cost-effective method of promoting renewable energy and clean technologies, protecting the environment, and preventing harmful impacts from global warming.
- By developing sustainable economic development strategies based on technological innovation and resource efficiency, places can grow their economies, improve their standards of living, and expand businesses, jobs, and incomes.

Building a long-term sustainable economic development strategy is a complex undertaking. It requires strong and consistent leadership, bold vision and the appropriate level of resources. But if done well, it can lay the foundation for a new and higher level of prosperity – prosperity based on “living off of nature’s income” and simultaneously growing your community’s stocks of natural, social/human, and economic capital.

Summary Points:

- *The sustainability revolution is here to stay.*
- *It will transform the way your economy works.*
- *You can achieve “win/win” outcomes – both increasing your resource efficiency and simultaneously building your economic competitiveness.*
- *Taking advantage of this opportunity will require some new ways of thinking and acting.*
- *While putting a sustainable economic development strategy in place is hard work, the roadmap of how to do it is relatively straightforward.*

Sustainability 3.0 – The Third Stage of Sustainability

We think it is useful to think of three forms of sustainability.

- **Sustainability 1.0** focuses on environmental protection to reduce pollution and waste, while encouraging preservation of nature and open space. Sustainability 1.0 is typically implemented by governmental regulation. For businesses, these regulations usually became a cost of doing business that gets passed on to consumers.
- **Sustainability 2.0** focuses on climate action through climate action plans that begin with the comparison of a place's current carbon footprint with its desired carbon footprint and then move on to formulate a set of actions that are designed to take that place from its current carbon footprint to its desired carbon footprint. These actions are typically a combination of regulations that are imposed on the market and subsidy incentives that supplement the market. Taken together they seek to require/encourage businesses to become low carbon.
- **Sustainability 3.0** focuses on Sustainable Economic Development which recognizes that a green market is emerging. Sustainable Economic Development policies and programs are specifically designed to guide the market in general and individual green/Clean Tech businesses, sustainable real estate developments, and green investments in particular. The market becomes an ally producing economic prosperity, low-carbon environmental quality, and social equity at the same time. Becoming greener becomes the way to become more profitable.

All three forms of sustainability are important in their own rights. However, in addition, Sustainability 1.0 and 2.0 provide a foundation for Sustainability 3.0, whereby places don't just become greener, rather, they can become richer by becoming greener and become greener by becoming richer.

Three Stages of Sustainability

- **Sustainability 1.0** – Focused on environmental protection.
- **Sustainability 2.0** – Focused on climate action and greenhouse gas reduction.
- **Sustainability 3.0** – Focused on sustainable economic development that makes the market an ally in producing economic prosperity, low carbon environmental quality and social equity.

The Opportunity for Cities and Regions

The transition to a carbon-constrained world will drive profound changes in every business, non-governmental organization, and household as well as every city, county, region, state, province, and nation. The question is whether the transition will be dominated by a potentially chaotic response to emergencies or a more orderly process of careful design, implementation, and evaluation.

The premise behind the creation of a Sustainable Economic Development Strategy is that a more orderly response to this inevitable transformation can be proactively organized and managed, and that this will lead to significant and widespread economic benefits.

Each place is unique. A strategy cannot be mechanically imposed. Rather it must grow out of the special conditions and the dynamic trajectory of each place. Pursuing a sustainable economic development strategy will require the following actions from a city or region:

- 1. Awareness.** Key leaders in government, business, civic leadership and economic development need to become personally convinced that the shift to a sustainable economy represents an opportunity worth pursuing.
- 2. Assessment.** You need to undertake a comprehensive assessment of your assets and challenges – where your economy is strong and where it is weak; and what the best opportunities are for you to pursue.
- 3. Strategy.** Your leadership team then needs to shape a broad strategy for action, with a focus and specific initiatives and actions. Our 13 dimensions of sustainable economic development can serve as a starting “menu” for this work.
- 4. Implementation Plan.** Each strategy needs to be converted into a detailed implementation plan, with budgets, timelines, champions, key performance indicators, and other features of good project management.
- 5. Measuring Success and Continuous Improvement.** As soon as you start taking action, you will have new insights and you will identify areas for improvement. You will need to build a performance management system that treats each strategy as a hypothesis and builds your capacity for rapid adaptation and learning. Benchmarking against best practices in other communities will be a key part of this work.

2 – The Sustainability Revolution

The Sustainability Revolution

Undertaking a sustainable economic development strategy is based on the premise that a sustainability revolution is taking place – from an old economy that is high carbon, high pollution, waste intensive, and ecologically disruptive, to a new economy that is low or zero carbon, low pollution, energy/resource efficient, and ecologically supportive. Businesses, cities, communities, and regions that lead this revolution will prosper, because the new economy will outperform the old one. Businesses, cities, communities, and regions that lag are in danger of being left behind.

Our time is somewhat analogous to 100 years ago when the automobile industry emerged and everything changed – the way cities and regions grew; the way transportation took place; which industries succeeded and which failed. In the 1920s, Detroit came to be the world headquarters of the global automobile industry and the wealthiest city in the country with the fastest growing population of any city in the world.

This time is also somewhat analogous to the information technology revolution 20 years ago when a complex of related technologies – the personal computer, the cell phone, and the internet – emerged and everything changed again, with the Silicon Valley / San Francisco Bay Area becoming the leading economic region in the world.

The phenomena of global warming, peak oil, and environmental dislocation; combined with the incentive and regulatory priorities in the European Union, Japan, and the U.S. administration of President Barack Obama provide inevitability to this transformation, making it the key to a successful 21st Century economy.

This time it is the green industries – conservation, resource efficiency, renewable-energy generation, pollution prevention, and waste minimization and recycling – that are the engines of transformation, and all businesses are coming to use their products and services.

Market Observations

On the following pages, we summarize what we believe are some of the key dynamics driving this new sustainable economy market. Many of these are related to the emerging connections between climate solutions and strategies, and private market forces.

It needs to be emphasized continuously that we are at the early stages of a significant transition, and the final shape of this market is far from clear. Many aspects of the transformation are still unclear and “in formation.” This maximizes the value of resilience and capacity for rapid response and adaptation.

What we think is very clear, however, is that competitive advantage will increasingly accrue to businesses and communities that take a “triple bottom line” approach – simultaneously building natural capital, social/human capital and economic capital. In particular, resource efficiency will increasingly become a critical competitiveness strategy – and eventually the power of the market will not only be focused on “preserving” resources and minimizing their use, but actually restoring and regenerating the capacity of our planet’s life support systems.

Finally, there is a dimension of this work that is often overlooked that we think bears highlighting – and this is the economic development potential of what are sometimes referred to as “sustainability savings” or “green savings.” The combined impact of improved building energy efficiency; reduced water use; more efficient transportation systems; and more compact walkable communities can have a significant impact on household income and broad “cost of living” affordability. As just one small example, the average annual cost of automobile ownership is approximately \$5,000 a year. So being able to get rid of one car is the equivalent to a \$5,000 pay raise – a huge impact, especially for low and moderate income households. This extra income in turn stimulates purchasing power in the economy that would otherwise not be there.

Market Observations

Observation	Description
<i>Sustainable Products and Services Create Long Term Growth</i>	The goals of improved environmental performance and energy independence (climate mitigation; climate adaptation; resource/energy efficiency; and alternative energy development) are driving the development of new products, services, companies, and markets that will outperform their non-green counterparts over the long run.
<i>Climate Action Supports Economic Development</i>	Leadership on climate change and regional/global economic competitiveness can reinforce each other rather than cancel each other out. Environmental performance can drive economic prosperity that can be equitable for different groups and places. Many of the specific climate mitigation strategies (such as clean renewable distributed energy and large-scale building retrofits) have natural economic development potential for stimulating new businesses and jobs.
<i>Economic Benefits Are Key to Long Term Environmental Leadership</i>	To be optimally successful, the goals for reducing greenhouse gas emissions need to be translated into self-reinforcing market dynamics. Sustainability solutions that combine improved environmental performance <u>and</u> economic benefits are the key to successful climate-change mitigation/adaptation strategies.

Market Observations

Observation	Description
<i>Urban Density Will Bring Comparative Economic Advantage</i>	As energy and natural resource efficiency become increasingly important competitive advantages in regional and global economies, urban sustainability strategies can be integrated with economic development and community development strategies that leverage the competitive advantage of urban density.
<i>Economic Benefits Come From Both Enterprise and Job Growth and Reduced Cost of Living</i>	Economic benefits can be realized in two basic ways: <ol style="list-style-type: none"><li data-bbox="614 629 1818 725">1. Increased participation in the emerging sustainable economy can generate new enterprises, new jobs, and new wealth.<li data-bbox="614 739 1818 929">2. The hidden advantages of “urban form” can create significant reductions in the cost of living and the cost of doing business through the integration of community design, energy efficient buildings, and mobility systems.
<i>You Don't Have to Reinvent All Your Practices – Just Refine and Refocus Them</i>	A sustainable economic development strategy can use many of the same best practices as other kinds of economic development strategies – it is just focused on different kinds of technologies, products, processes, companies, markets, and career pathways.

The Goal of Sustainable Economic Development

Sustainable economic development helps cities and regions build an economic base that simultaneously creates new jobs and businesses; improves local standards of living; reduces income inequities; and improves the environmental performance of the local economy.

For cities/regions to be successful in the 21st Century, their economic development strategies need to reorient to the sustainability revolution and address the financial, social, and environmental performance of businesses and of the economy.

Targeted Sustainable Economy Outcomes

- **Improved Business Sustainability Performance.** All businesses in a region become greener and, at the same time, more economically productive.
- **Sustainable Business Clusters.** Businesses that specialize in environmental products and services (the clean tech business cluster) are enabled to start-up, locate, and grow in the region.
- **Improved Local Demand.** Households are mobilized as educated green consumers, and local institutions drive demand for new products and services through their policies and buying practices.
- **Sustainable Built Environment.** Sustainable real estate development takes place – development that is mixed-use, mixed income, walkable, energy and resource efficient, and transit-oriented.
- **Business Support.** The regional financial, workforce, and educational infrastructure understands sustainable enterprises and prepares people to participate effectively as workers, consumers, and investors.
- **Sustainable Infrastructure.** The regional physical infrastructure provides energy, water, materials, buildings, and mobility in a way that is both ecologically and economically efficient.
- **Market Image.** The region is recognized as a place that is in the forefront of the sustainability revolution, becoming an economically, socially, and environmentally better place to live, work, and locate a business.

Sustainable economic development initiatives bring multiple kinds of benefits to a region. But they also require high levels of coordination and integration across traditional “silos” that present challenges to a traditional economic development process.

3 – Sustainable Businesses

Three Forms of Capital

The sustainability revolution is based on the fundamental recognition that there are three forms of capital essential to the creation of genuine prosperity. In addition to economic capital (financial and manufactured), there are two other forms – natural and social.

- **Natural Capital:** The economy operates within design limits inherent in the natural environment. If the economy disrupts the environment it disrupts itself, at great financial cost to society and to individual businesses. Historically corporations have often treated natural capital like a “free” asset to be exploited on a first come, first serve basis. As a result, enormous resources have been lost that were once, in fact, provided for free by intact ecosystems. Conversely, the sustainability revolution recognizes the economy’s dependence on the environment for fresh air, clean water, climate stability, renewable energy, and a thriving eco-system. Businesses need to derive value from the eco-system without disrupting it. In fact, the human economy is really a subset of the natural “economy” rather than vice-versa. As the sustainability revolution proceeds, true cost pricing and true cost accounting to value major contributions of the natural world are emerging.
- **Social Capital:** A prosperous economy depends on a stable society with an effective workforce. The economy threatens its own foundations if it disrupts society by allowing an extreme gap to emerge between the very wealthy few and the rest of the population or by inadequately supporting society’s ability to ensure public safety, an effective educational system, a well trained workforce, and quality affordable health care. At the same time, a prosperous economy contributes to a stable society by creating the jobs, the opportunity for productive work, and the income that people need to live satisfying lives. The sustainability revolution recognizes the profound contribution of social capital to a prosperous economy and builds social capital by paying its fair share of taxes and making investments in a healthy society in many other ways.
- **Economic Capital:** Economic Capital is most widely understood by economists and policy makers. It includes the finance, manufacturing, production, and physical infrastructure (energy, water, transportation, and information). Sustained economic prosperity requires that both the private sector and the public sector operate according to sound financial principles. Private and public players need to live within their means and continuously reinvest in their Economic Capital. The real estate meltdown and the resulting great recession is an example where economic policies led to a destruction of Economic Capital.

Three Forms of Capital in a Business

Any business-person knows that, over the long run, a successful business needs to invest wisely to generate more income than expenses and to grow its capital. If a business lives off its capital, it will eventually go bankrupt. This is just as true for natural and social/human capital as it is for economic capital.

By holding themselves accountable for superior performance in each of these three areas, the companies adopt what has been referred to as a “multiple bottom line” or an “integrated bottom line” business strategy, seeking performance outcomes beyond simple financial ones.

The key premise to this approach is that these domains of business performance reinforce each other – that instead of requiring trade-offs (i.e. I have to sacrifice profits to achieve higher environmental performance), an integrated approach improves overall competitiveness (e.g. better environmental performance spurs innovation and creates new efficiencies that improve profits).

“Sustainable development is living on nature’s income rather than its capital.”

(Bjorn Stigson, President, World Business Council for Sustainable Development)

Defining the Three Forms of Capital in a Business Context

Economic Capital: Company assets that can be readily converted into some form of money (stock; cash; property; equipment; licenses; etc.). Economic capital is developed through the process of customer value creation.

Social & Human Capital: The physical, mental, emotional and spiritual capabilities of employees, and their relationships with each other. Human and social capital is created through the processes of learning and trust building.

Natural Capital: The natural resources and ecologies that a company depends on for its raw material inputs, as well as the environment in which it and its employees live. Natural capital is created through the natural processes of water, mineral, energy and biotic cycles.

Multiple Performance Outcomes

A multiple bottom line or integrated bottom line business model requires that there be clear performance outcomes that reflect the business approach – the various bottom lines need to be defined in ways that are measurable and that create accountability.

CAPITAL	WHAT SUCCESS LOOKS LIKE
Natural Capital	The enterprise radically reduces consumption of minerals, biological products, energy and water in an effort to eventually become part of a “closed loop” industrial ecology. Long-term, the enterprise contributes to the “re-weaving” of the natural ecology that has already been destroyed (restoration).
Social & Human Capital	The enterprise nurtures the intellectual, physical, psychological and spiritual growth of its employees and contributes to the economic, social and environmental well-being of the communities that it is located in.
Economic Capital	The enterprise creates sufficient economic value added to: <ul data-bbox="517 993 1765 1269" style="list-style-type: none">• Generate competitive rates of return for its investors• Pay acceptable compensation to its employees that exceeds “livable wage” standards• Accumulate adequate financial reserves• Maintain robust infrastructure (offices, IT, plant, equipment, etc.)

Connecting The Three Capitals to Core Business Processes

There are opportunities to contribute to “multiple bottom line” capital formation across many different enterprise functions. Serious sustainable enterprises develop differentiated strategies across their key business functions.

Enterprise Function	Ways It Can Help Build the Three Capitals
<i>Mission</i>	What its purpose is; what its long term vision is; how it communicates to stakeholders
<i>Leadership</i>	What it values; who it recruits; how it develops leadership
<i>Marketing and Product Development</i>	Who it sells to; what it sells; how it designs products and services; where it sells
<i>Production</i>	How it produces; how much waste it creates; technology it uses
<i>Human Resources</i>	Who it hires; how many; how diverse; how it develops them; where they are located
<i>Supply Chain Management</i>	What it buys; where it buys it; who it buys from; how it develops its supply base
<i>Facilities</i>	Where it locates; how it constructs its facilities
<i>Finance</i>	Where it borrows money; where it invests funds; how it distributes profits/surplus
<i>Community Relations</i>	Who it gives money to; how it contributes to the community; who they lobby/influence and on what issues

Different Kinds of “Sustainable” Business

Encouragement of sustainable business is at the heart of any Sustainable Economic Development Strategy. There is a lot of debate about what is and is not a “sustainable” business. The terms “sustainable”; “green”; “clean technology”; and “low carbon” tend to be used interchangeably without much differentiation. We believe it is important to acknowledge that this is a practice area that is evolving and that we will have to settle for a bit of ambiguity in the near term.

In a very general way, businesses can be divided by whether they are a sustainable “producer” or whether they are a sustainable “user.”* “Producers” develop, create and sell sustainable products and services – i.e. products and services that reduce non-sustainable resource consumption. “Users” seek to embody sustainable business practices in the way they carry out their operations. We refer to “producers” as “clean tech” companies, and we refer to “users” as “green” companies. “Sustainable” businesses are green or clean tech business that also seek to build social/human capital.

Sustainable Businesses

Businesses that “live off of nature’s income” and seek to simultaneously build natural, social/human and economic capital.

Sustainable “Producers”
(aka “Clean Tech” companies)

Develop and market products and services that reduce non-sustainable resource consumption

Sustainable “Users”
(aka “Green” companies)

Manage their business enterprises in ways that reduce non-sustainable resource consumption

*The Brookings Institution and Battelle are currently developing a more rigorous approach to defining and quantifying these two approaches to ‘green’ industry.

How Big is the “Green” Economy?

A recent (April 2010) report by the US Department of Commerce Economics and Statistics Administration (ESA) conducted a detailed assessment of the size of the green economy. The Measuring the Green Economy report looked at 732 detailed product codes for green products and services. Based on this analysis, they came to the following conclusions:

- Green products and services comprised only 1% to 2% of the total private business economy in 2007.
- The number of green jobs ranged from 1.8 million to 2.4 million.
- The services sector accounted for 75% of green business activity; manufacturing for 13%.
- Energy conservation, resource conservation and pollution control accounted for 80% to 90% of green business activity.
- Between 2002 and 2007, the share of green shipments and green jobs in manufacturing remained fairly constant.
- The green economy is in a position to grow quickly, but the relatively small size of the green economy suggests that a majority of the new growth during the recovery will come from products and services outside of the green economy.
- The process for measuring the green economy is far from exact; better definitions and alignment of data sources are needed.

Definition of Green Products and Services

The ESA report defines green products and services as those whose predominant function serves one or both of these goals:

- Conserving energy or other natural resources
- Reducing pollution

These basically are the “sustainable producers.” The report does not cover “sustainable production practices” – companies who produce “non-green” products and services in ways that conserve resources.

Out of a total universe of 22,000 product codes, the ESA “conservative” definition covers 497 product and service codes; the “broad” definition covers 732 products and service codes.

Segments of the Green Economy

There are several ways in which people are beginning to segment the sub-sectors of sustainable producers and users. The following several slides integrate several of these approaches into a taxonomy of increasing levels of detail.

Category	Description	Segments
Clean Energy Sources	<i>The production, storage and distribution of renewable or low carbon energy sources.</i>	<ul style="list-style-type: none"> • Clean energy generation • Energy storage • Energy infrastructure
Energy Efficiency	<i>Technologies and services that reduce the amount of energy consumed by different sectors of the economy.</i>	<ul style="list-style-type: none"> • Building energy efficiency • Appliances and controls • Energy management
Green Production Practices	<i>Enterprises that produce products and services or use production practices that reduce the consumption of natural resources.</i>	<ul style="list-style-type: none"> • Transportation and logistics • Manufacturing and industrial • Materials and nano-technologies • Green construction • Agriculture
Pollution Mitigation, Conservation, and Restoration	<i>Enterprises and technologies focused on reducing pollution or conserving and restoring natural ecologies.</i>	<ul style="list-style-type: none"> • Water and wastewater • Air and environment • Materials recovery and recycling
Support Services	<i>Consulting and other services that help enterprises develop and implement green and clean technologies.</i>	<ul style="list-style-type: none"> • Advocacy and policy • Green business consulting • Green finance • Research and development • Education

The Next Level of Detail

Category	Segment	Sub-segments				
Clean Energy Sources	Clean Energy Generation	Distributed & renewable energy		Equipment, controls, software, services		
	Energy Storage	Fuel cells	Advanced batteries	Hybrid systems		
	Energy Infrastructure	Transmission	Demand Mgt.	Smart grids	Power monitoring	
Energy Efficiency	Energy Efficiency	Energy mgt.	Building Efficiency	Appliances	Controls & meters	Research
Green Production Practices	Transportation and Logistics	Alt. Fuels	Alt. Vehicles	Fuel Efficiency	Logistics	Transit systems
	Manufacturing and Industrial	Life cycle design	Packaging	Smart production	Industrial ecology	
	Materials and Nano-Technology	Nano, bio, chemical and other new, more efficient materials				
	Green Construction	Design & construction	Building materials	Site management	Green Real Estate Dev.	
	Agriculture	Organic farming	Sustainable Forestry	Sustainable Aquaculture	Sust. Food Processing	Local food syst.
Pollution Mitigation and Conservation	Water and Wastewater	Filtration	Conservation	Wastewater	Pumping/Metering	
	Air and Environment	Purification	Emissions control	Land conservation	Eco-system regeneration	
	Materials Recovery & Recycling	Recycling	Waste Mgt. & Treatment		Recycling machinery	
Support Services	Advocacy and Policy	National climate & env. member organizations	Community-based environmental org.	Policy think tanks		
	Green Business Consulting	Env. Law services	Sustainable business consulting	Product branding and marketing		
	Green Finance	Emissions trading & offsets		Green investment funds		
	Research & Development	Federal R&D Institutes	IP commercialization	Private R&D labs		
	Education	Sustainable business certificates & degrees		Green career pathways & certificates		

4 – Sustainable Economic Development In Practice

Examples of Sustainable Economic Development

- The State of California is an example of the fact that the Sustainability Revolution is taking off.
- Three different examples of Sustainable Economic Development Strategies at three different scales (city, region and state) demonstrate some of the different approaches that can be taken.
 1. San Antonio's "Mission Verde" is an example of a city strategy.
 2. The Silicon Valley Climate Prosperity Strategy is an example of a regional strategy.
 3. The State of Delaware's Climate Prosperity Strategy is an example of a State strategy.

The California Example

The example of California provides striking evidence that the sustainability revolution is, in fact, picking up speed in a way that is highly beneficial economically.

The [California Green Innovation Index](#) provides a dashboard that depicts the impact of “three decades of ambitious state environmental and energy policies, putting California on a path to energy independence and one of the lowest per capita carbon footprints in the nation, all the while growing one of the most vigorous economies in the world.” And California’s green industries have proved to be more recession resistant.

- California’s energy productivity – Gross Domestic Product (GDP) per unit of energy – is 68% greater than the rest of the nation.
- In 2006, energy consumption per capita in California was 18% lower than 1970 levels, while energy consumption per capita for the rest of the country remained at 1970 levels.
- California’s economy is less than half as carbon intensive as the rest of the U.S. While GDP per capita in California increased by 28% in the 16 years following 1990, gross emissions per capita are 10% lower than 1990, thereby demonstrating that it is possible to increase economic prosperity while also reducing greenhouse gas emissions.
- California’s increased energy efficiency over the last 35 years has saved consumers over \$56 billion, creating 1.5 million fulltime jobs and \$45 billion in annual payroll.
- The 2009 Index shows that green jobs are increasing more rapidly than other jobs, with total jobs increasing by 1% statewide, while green jobs have increased by 10% since 2005.

San Antonio – “Mission Verde”

In January 2009, the City of San Antonio, Texas launched *Mission Verde* focused on the economic opportunities inherent in the transition away from a carbon-intensive economy to a sustainable economy.

The Mission Verde Strategy: “*Mission Verde*...is more than an environmental policy; it is an economic one. This economic approach runs deep. It is driving new technologies, new opportunities, and new jobs. It is expressed in the writings of the best-selling author and columnist Thomas Friedman and the noted economist Jeremy Rifkin, who both see this change as nothing less than the beginning of the Third Industrial Revolution and the future of the U.S. economy. It will be one of the most dramatic economic changes in world history.”

San Antonio is already a national leader in water conservation and open space preservation. Led by the San Antonio Water System, San Antonio uses the same amount of water it did 20 years ago and saves \$550 million, even though the city’s population has increased 50%. San Antonio has also extended the famous River Walk to be a 13-mile linear park and is building a 311-acre park in a heavily developed part of the City.

According to the plan, “we must invest in green technology, energy conservation, renewable energy, efficient transportation, and smarter buildings. We must build a new energy infrastructure that transforms our city from reliance on centralized power to distributed power. We must create a multi-modal transportation system that is integrated and efficient. We must bring venture capital to invest in new green businesses and technology. With *Mission Verde*, San Antonio has a plan to do this...to compete successfully in a 21st Century global economy.”

Implementing the Strategy

San Antonio is well on its way in the implementation of *Mission Verde*. The City has already:

- Worked with CPS Energy, the municipal utility, to undertaken construction of Texas’ largest photovoltaic solar energy plant, which will produce 14 Megawatts of electric power. Also, the utility has committed \$96 million to reduce peak demand by 115 MW by 2011 through energy efficiency .
- Established a Green Jobs Leadership Council.
- Opened the *Mission Verde* Sustainability Center as a Green One-Stop Center and training facility, on the site of a previously closed school,.
- Adopted a green high performance building code.
- Expanded free weatherization programs and provided resource efficiency retrofits in City buildings and through out the City.
- Completed a feasibility study and market assessment for the Multi-Tech Venture Fund.
- Convened a task force and made recommendations on a multi-modal transportation system.

Mission Verde Initiatives

- **21st Century Energy Infrastructure**—generating energy from renewable energy sources such as solar, wind, biomass, and geothermal, originated from buildings and homes, stored until needed, and connected with a multi-directional grid.
 - **Multi-Tech Venture Capital Fund** —building a regional fund headquartered in San Antonio, capitalized at \$100 million, and managed by Brooke Private Equity Advisors.
 - **Green Jobs Program** —collaborating with employers and educators to match training for existing and emerging green and Clean tech jobs with employer needs.
 - **Sustainable Economic Development Strategy** — using tax abatements, cluster development strategies, business attraction and retention programs focused on clean and green technology companies.
 - **Green High-Performance Building Code** —moving in phases toward a building code for new residential and commercial construction that produces net zero carbon by 2030.
- **Green Retrofit Program** —expanding free weatherization combined with a retrofit program paid for with a surcharge on utility bills. (San Antonio recently received a \$10 million building retrofit ramp-up grant from USDOE to accelerate this strategy).
 - **Integrated Multi-Modal Transportation System** — pursuing and funding light rail, high capacity rail, and multiple transportation options.
 - **Sustainable Real Estate Development** —utilizing real estate investment funds to advance mixed-use, mixed-income, walkable, transit-oriented, infill neighborhoods.
 - **Green One-Stop Sustainability Center** —coordinating sustainability efforts, centralizing the location of sustainability groups and helping to facilitate their activities, demonstrating sustainability best practices, and providing comprehensive information services to residents and businesses.
 - **Leading by Example** —addressing energy conservation, resource efficiency, waste reduction, vehicular emission improvements across all City Departments, coordinated by the City Government's Office of Environmental Policy and its Sustainability Task Force.

Silicon Valley Climate Prosperity Strategy

The Silicon Valley region, in the San Francisco Bay Area, has been a leading force in two economic revolutions—the Information and Communications Technology revolution and the Biotechnology revolution. Now it seeks to be the leader in a third economic revolution—the Clean and Green Technology revolution.

Building on Silicon Valley's history of innovation, Joint Venture: Silicon Valley Network, working with business, government, academia, labour, and the community, has developed a Climate Prosperity Strategy and established a Climate Prosperity Council to encourage the growth of clean and green industries and, simultaneously, to reduce greenhouse gas emissions.

Climate Prosperity Strategy: The Silicon Valley Climate Prosperity Strategy, launched in February 2009, is designed to stimulate regional demand for clean and green technology and, at the same time, to supply those new products and services to the global marketplace.

Climate Prosperity Council: To guide the implementation of the Climate Prosperity Strategy, Joint Venture: Silicon Valley Network created the Climate Prosperity Council made up of industry, public sector, academic, and community leaders and Co-Chaired by the Mayor of San Jose and the California Managing Director of Accenture.

Working on Supply & Demand

Demand Side Strategies:

- **Renewable energy**
- **Building efficiency**
- **Clean, convenient transportation**
- **Green infrastructure**

Supply Side Strategies:

- **Innovation production**
- **Regulatory climate**
- **Investment**
- **Land and facilities**
- **Workforce**
- **Promotion**

Silicon Valley Climate Prosperity Benefits

Through its Climate Prosperity Strategy, Silicon Valley is pursuing a number of important benefits, including:

- **Increased disposable income.** More energy efficient homes and cars means less money spent on energy and more disposable income that is likely to stay in the community.
- **Regional demand stimulation.** Adding solar and other renewable energy sources on residential, commercial, and industrial buildings accomplishes important energy saving goals, expands a newly emerging business sector, and stimulates the regional economy.
- **Job creation.** Retrofitting homes and offices to be more energy efficient creates new jobs for construction workers, energy auditors, efficiency monitoring tools, network installers, and manufacturers of products ranging from temperature sensors to building components made from sustainable materials.
- **Environmental and quality of life improvements.** The ongoing search for transportation alternatives reduces the use of fossil fuels, cleans up the air, and has important lifestyle and health benefits.
- **Talent attraction.** Liveable, walkable, and sustainable communities are more appealing to the rising generation of green talent needed to live and work in Silicon Valley.
- **Reduced carbon emissions.** Progress on all these fronts helps California achieve its goal of reducing Greenhouse Gas emissions by 80% from 1990 levels by 2050.

Win/Win Benefits

“While many regions are looking to reduce greenhouse gas emissions, Silicon Valley is in a position to both reduce emissions and grow new industries. In this new era, “Climate Prosperity” is an approach that fits how our region works.

Silicon Valley can generate substantial economic and employment growth by demonstrating the innovation, efficiency and conservation of all resources is the best way to increase jobs, income, productivity and competitiveness.”

(“Climate Prosperity – A Greenprint for Silicon Valley”)

Delaware

In November 2008, then-State Treasurer Jack Markell was elected Governor of the State of Delaware on a platform that included undertaking a Climate Prosperity Strategy. The Delaware strategy includes the following initiatives:

Delaware Modernization Service: The Delaware Climate Prosperity Strategy is pursuing Green Savings by establishing the Delaware Modernization Service in partnership with the State's Sustainable Energy Utility (SEU). The Modernization Service is auditing existing homes and businesses for needed energy efficiency improvements and providing small grants for modernization—thereby stimulating the market for green products and services.

Global Green Supply Chain Service: Delaware is creating the Global Green Supply Chain Service to help small businesses to understand their place within the global green supply chain, identifying markets and connecting small businesses to them. The Supply Chain Service will identify how Delaware's businesses can immediately participate in the sustainable economy, how they can engage in more efficient production processes, and how they can develop and expand clean and green products and services to reach state, regional, and global markets.

Delaware Green Talent Initiative: The Delaware Green Talent Initiative is partnering with the University of Delaware, Delaware State University, Delaware Technical and Community College, and other educational institutions, to develop eco-knowledge networks in: marine energy; electric vehicle-to-grid conversion; life sciences; green financial services; sustainable agriculture; eco-tourism, high efficiency solar; and climate prosperity economic development.

Win/Win Benefits

"Green is both a symbol for money and a symbol for the environment. I want to help Delaware businesses see their potential opportunities in the global green economy, because it will help get our economy moving again and it is good for our air, soil, and water.

Adopting a Climate Prosperity strategy in Delaware will not only grow our economy and create good-paying jobs, but it will also help Delawareans save money on their energy bills and help our environment by reducing pollution. Everyone wins when we create jobs and help the environment."

(Governor Markell August 2008 campaign speech.)

PART TWO:

STRATEGY CREATION

5 – Creating Your Sustainable Economic Development Strategy

Key Steps in Strategy Development

Building a long-term sustainable economic development strategy is a complex undertaking. It requires strong and consistent leadership, bold vision and the appropriate level of resources. The Initiatives and Actions in this framework provide a menu of options for a city or region to choose from in undertaking this work. A disciplined structure and process is needed to convert these options into an integrated plan with a clear path to implementation.

Each place is unique. A Sustainable Economic Development Strategy cannot be mechanically imposed. Rather it must grow out of the special conditions and the dynamic trajectory of each place. According to our approach, the strategy needs to be guided by a local/regional Leadership Structure and a Consultation Team collaborating in partnership through a series of five distinct phases of work.

1. An **Initial Consultation** to establish the goals and objectives and the work plan for the process.
2. A **Strategic Assessment and Opportunity Analysis** of the area-wide economy, to identify its current direction, its strengths and weaknesses, and the opportunities and challenges for Sustainable Economic Development.
3. Design of a **Sustainable Economic Development Strategy** that builds on the momentum that already exists and weaves together a set of Sustainability Initiatives and Green Actions to create a clear, coherent, easily understood, dynamic strategy, with a strong business model.
4. Formulation of an **Implementation Plan** – including a system for monitoring progress – that addresses who is responsible for each Initiative and Action, the timeline and milestones, the costs, the sources of potential revenues, and the processes for mid-course corrections.
5. Initiation and, subsequently, **full implementation** of the Strategy and Implementation Plan.

Key Steps in Strategy Development

1. Create Your Leadership Structure
2. Identify a Consultation Team
3. Organize the Phases Of Work
4. Conduct the Strategic Assessment and Opportunity Analysis
5. Create the Strategy Including Initiatives and Actions
6. Formulate an Implementation Plan, including Timeline, Costs, Revenues, and Modes of Evaluation
7. Launch the Strategy and the Plan

Leadership Structure

Typically, the leadership structure for a Sustainable Economic Development Strategy includes three elements:

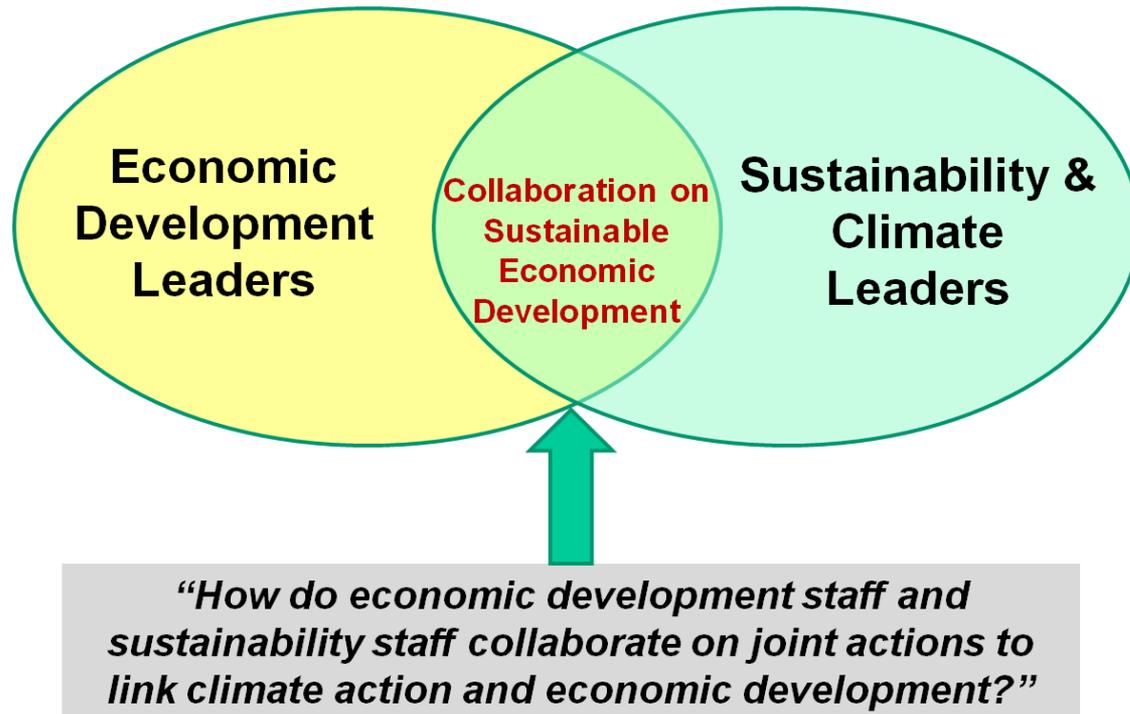
1. A **Leadership Group**, which is usually a pre-existing local or regional organization that has committed to lead the effort.
2. A **Decision-Making Council**, made up of the key leaders from a variety of different organizations, who are guiding the creation and implementation of the Strategy.
3. A broader **Stakeholder Advisory Group**, composed of the full range of public, private, and civic stakeholders supporting the Sustainable Economic Development Strategy, who are advising the process.

Examples of Stakeholder Participants

- Political leadership (Mayor's office; County Commissioners)
- Economic Development Organizations
- Community-Based Organizations
- Business Leadership
- Investors (banks; Angel/Seed capital networks; venture funds)
- Education (K-12; community colleges; universities)
- Workforce Development
- R&D Institutions
- Regional Planning Organizations
- Unions

Economic Development & Sustainability Staff

Many cities now have Sustainability Coordinators, but the Sustainability Coordinators and the Economic Development Staff often operate in silos. Sustainability Coordinators often are not conversant with economic development strategies and best practices. At the same time, Economic Development Staff often do not possess sustainability expertise. Creation of a Sustainable Economic Development Strategy provides an opportunity for the two groups to come to understand one another, work together, and create a common framework for systematic collaboration. This requires acknowledging some of the cultural differences between their worlds.



Some Differences to Acknowledge

Economic Development Field

- Well established field with many parts of the professional infrastructure well in place (standards; tools; certifications; etc.)
- Well established public acceptance for rationale and outcomes.
- Significant resources committed for company subsidies – especially on the attraction side.
- Often short-term transaction oriented (“doing deals”) – economic development staff that have a strategic sector orientation and knowledge are not the norm.
- Success typically measured in company investment and jobs created/retained.
- Significant changes happening in the field in terms of thinking about innovation; entrepreneurship; and the role of regional economies.
- Staff come from backgrounds in the public sector and business/marketing.

Sustainability and Climate Field

- New field in early stages of professional development.
- Still building public understanding of the benefits, as well as the nature of the work.
- Heavily driven by scientific analysis and understanding.
- Resource base for the work has not yet been standardized.
- Typically oriented towards long-term thought horizons (“ice age to ice age”).
- Success measured in greenhouse gas reductions and increased adaptation.
- Staff come from a wide variety of backgrounds, including law; engineering; environmental policy; planning; etc.

Role of a Consultation Team

It is highly unusual that a city or region will have on staff individuals with both the skill sets and available time to facilitate and help develop the Sustainable Economic Development Strategy, at the intersection between economic development and sustainability. More typically, the region will contract with outside expertise to support this work. It is important to be very clear on what the role of the consultation team is; how it is structured; and what the expected deliverables are. Some of the roles this team can assume include:

- **Stakeholder Team Development.** Undertake an initial set of meetings with stakeholders to constitute a Stakeholder Team for the Strategy, including collaboration between economic development staff and sustainability staff.
- **Opportunity Scan.** Complete an initial scan of the city or regional economy, sustainability assets and liabilities, challenges, and opportunities.
- **Strategy Development.** Recommend the Sustainable Economic Development Strategy, including the Initiatives and Actions to be included (drawing from those in this paper as well as from suggestions from stakeholders).
- **Strategic Partnerships.** Suggest the other strategic allies to be included in a Strategy Consultation Team.
- **Measures of Success.** Propose the key performance indicators, success metrics, modes of monitoring and evaluation.
- **Implementation.** Propose a process, timeline, business model, and budget for formulation and implementation of the Strategy.

Opportunity Assessment

The first step in the strategy-development process needs to be an assessment of the city or regional economy, highlighting its sustainability assets and liabilities. One of the most important roles that a Sustainable Economic Development Strategy can perform is to provide a simple, coherent framework for examining the city or region's different sustainability assets and liabilities as aspects of a coherent economic, social, and environmental system. Ultimately a Sustainable Economic Development Strategy needs to propose ways to build on the assets, address the liabilities, and measure results.

Economic Assessment

- Cluster analysis of industry sectors.
- Investment infrastructure, including: angel groups, venture funds, banks, insurance companies, and pension funds.
- Pattern of high, medium, moderate, and low income neighborhoods.
- Gross domestic product (where information is available).
- Calculation of greenhouse gas emissions to establish carbon footprint
- Economic productivity – ratio of energy consumed to gross domestic product.

City/Regional Government Assessment

- Current economic development strategy.
- Resources currently devoted to business and economic development in city/regional departments, including: economic development, city planning, zoning department, and others.
- Programs for addressing jobs, housing, and wealth creation in these neighborhoods.
- City codes and regulations for businesses, buildings, and land use.
- Current city/region sustainability/green policy.

Physical Infrastructure Assessment

- Energy utility, including sources of energy, and energy conservation and efficiency programs.
- Water and sewer utilities, including sources of water and water conservation and efficiency programs.
- Highways and streets, including single occupancy vehicle miles traveled; Public transit system.
- Open space and parks; tree canopy.

Social Infrastructure Assessment

- Residential population, workforce population, green workforce population, green talent assessment.
- Educational system – pre-K through university, including: business development, entrepreneurship, tech transfer, and sustainability programs
- Workforce development system.
- Environmental and cultural amenities.
- Environmental, green, sustainability, business, and community development stakeholder groups.

Business Assessment

- Green businesses located in the city/region.
- Status of the Clean Tech Cluster in the city/region.

The Strategy

The strategy document is your equivalent of a strategic plan providing a high-level overview of the following elements:

- **Purpose.** Overall rationale for pursuing a sustainable economic development strategy, including assumptions about how improved environmental performance can be linked to wealth creation.
- **Vision.** Your vision for how your city, region or state can play a distinctive role in the emerging sustainable economy. This includes your hypothesis about where your distinctive advantages lie, and where your best opportunities are.
- **Focus.** The theme or themes that tie the different elements of the strategy together.
- **Initiatives.** A brief description of the key initiatives you will undertake.
- **Measures.** How you will measure success.
- **Implementation.** How implementation details will be developed, and where people go to get more information on each strategy.

Characteristics of a Good Strategy Document

- *Short enough that people will want to read it.*
- *Relatively simple, straightforward and easy to understand.*
- *Provides a strong unifying theme for multiple strategies.*
- *Lays out a limited number of strategies with clear success metrics.*
- *Connects to peoples' inherent sense of the place and its history and heritage.*

The Implementation Plan

The implementation plan takes the strategy to the next level of detail – the “what, who, when, and how much” for each individual action within each initiative. Key things that will need to be covered include:

- **What.** The specific action that is contemplated and what it is expected to accomplish.
- **Who.** Who is responsible for implementing the action.
- **When.** Key timelines and milestones.
- **How Much.** The budget for the action, and what the measures of success are.

The implementation plans will need to be developed by the parties that are responsible for the work that they encompass. Because of this, the Implementation Team will often involve different players than the Planning Team.

A Template for Implementation Plans for Each Action

1. *Description of the Action and what it involves.*
2. *Intended deliverables – what will be in place when it is completed.*
3. *What needs to be done to implement it.*
4. *Timeline for each implementation step.*
5. *Key staff responsibilities for each implementation step.*
6. *The project budget and sources of funds.*
7. *Success measures and how they will be tracked.*

Business Model

It is also very important to pay close attention to the business model that is built into each Sustainable Economic Development Strategy. The Strategy should not just result in costs. Rather the Strategy should generate the revenues to pay for implementing the strategy and/or provide a return on the investment of the funds needed to implement the Strategy.

It is legitimate for governments to use a portion of increases in business permits and other licensing fees, property taxes, sales taxes, transfer taxes, income taxes, valued added taxes, and other sources of revenue, directly or indirectly attributable to a Sustainability Strategy, as a way to pay for its expenses. However, it is also important for the Strategy to look for all of the other potential sources of income and financial support to supplement government expenditures.

The Sustainable Economic Development Strategy as a whole and each of the Initiatives and Actions to be incorporated in the Strategy should include an aggressive pursuit of ways to generate income and support.

Examples of Potential Sources of Revenue

- **Business Support.** Businesses can sponsor the Strategy as a whole, as well as different Initiatives and Actions.
- **Fee for Service.** Businesses can pay modest fees for services, particularly when they are tied to savings and increases in income.
- **Transaction Fees.** Successful financings and business transactions can yield small success fees. Carbon credits and offsets can be accumulated and sold.
- **Partnerships.** Public/private partnerships can be created that incorporate sources of private support.
- **Federal Funding.** Public agencies, private organizations, and public/private partnerships can all pursue the many sources of new federal funding emerging in the Obama Administration for the type of Initiatives and Actions incorporated in the Strategy.
- **Foundation Grants.** Grants can be solicited from philanthropic and corporate foundations.

Strategy/Implementation Guidelines

Here are some general guidelines for thinking about your strategy and implementation plan development process.

- **Customize.** Strategy creation is not a mechanical process, not a cookie cutter. Each Strategy (as is clear from the examples above) is unique to a particular place and that place's resources, opportunities, and challenges.
- **Make sure the right people are in the room.** A Strategy needs to involve the right stakeholders. The time you spend involving them in the process at the front end will be more than saved in the implementation process at the back end. A stakeholder involved in the process becomes your ally; one excluded can become a barrier.
- **Let the strategy evolve.** As more and more Sustainable Economic Development Strategies/Implementation Plans are created additional Actions and even additional Initiatives will be added to the repertoire. Once you start implementing, you will learn new information that will inform future actions. Act like Mother Nature – adapt and evolve!
- **Connect with others.** As more and more Sustainable Economic Development plans are created in different places, there is the opportunity to evolve a learning network of places that have done this. You should proactively reach out to your peers in other regions to learn from their experience.
- **Measure and monetize the benefits.** Finally, your long term success will depend on demonstrating a “return on investment” from this work. Make sure you measure what you do, and always see to convert value into cash that can fund future work.

6 – Dimensions of a Sustainable Economic Development Framework

Why a Framework Is Important and How It Works

The material in this section lays out a framework for thinking about how to implement a sustainable economic development strategy. A framework like this can be useful because it allows us to:

- **Rapidly organize large volumes of information.** (If you have a framework, it gives you “bins” in which to put the information as you come in contact with it.)
- **More efficiently communicate with others.** (When we share a framework, we can talk in “shorthand” and radically compress the time and effort to share information and come to common understandings.)
- **Screen out information not relevant to the problem being worked on.** (Frameworks are like “filters.” They suppress some information, and they highlight other information.)

The field of Sustainable Economic Development is still quite young. The intellectual frameworks that will guide development of the field are still in the early stages of development. The purpose of this material is to help accelerate this evolution.

Any Framework evolves and that is particularly true of the first Framework in a new field and body of theory and practice. This Framework will definitely evolve. That’s why this Framework is presented as a Power Point, not a stone tablet.

“There is nothing more practical than a good theory.”

(Kurt Lewin)

“Every practice rests on theory, even if the practitioners themselves are unaware of it.”

(Peter Drucker)

Three Broad Categories of Work

There are three broad categories of sustainable economic development work. The three categories of work include:

- 1. Build Local and Regional Demand** – Using policies, incentives, investments and behavior changes to build demand for sustainable practices, products and services.
- 2. Strengthen Local and Regional Supply** – Supporting the creation, development and attraction of sustainable businesses and clusters.
- 3. Engage People in the Sustainable Economy** – Building skills for the sustainable economy and engage communities in the process.

Within each broad category of work, there are several different kinds of opportunities. We think of these as “lenses” – each lens reveals different kinds of actions you might pursue. Depending on the nature and history of your community, some of these will be more important than others. It is important to avoid “lens fixation” where one approach is pursued to the exclusion of others.

There Are Multiple Opportunities Within Each Category

Build Local and Regional Demand

- Sustainable Business Practices
- Green Building Retrofits
- Sustainable Real Estate Development
- Sustainable Infrastructure Investment
- Large Scale Behavior Change

Strengthen Local and Regional Supply

- Clean Tech Cluster Development
- Clean Tech Technology Transfer
- Clean and Green Tech Business Support
- Sustainable Finance
- Sustainable Branding and Marketing

Engage People in the Sustainable Economy

- Green Talent Systems
- Sustainable Community Development
- Sustainable Community Engagement

Build Local and Regional Demand

Opportunity	Description
<i>Sustainable Business Practices</i>	Improving the environmental performance of existing businesses (whether or not they produce an environmental product or service), non-governmental organizations, and government agencies by realizing the potential for implementing significant improvements in energy conservation, resource efficiency, and waste reduction.
<i>Green Building Retrofits</i>	Improving the financial/energy/resource efficiency of existing residential, commercial, and public buildings and building user behavior.
<i>Sustainable Real Estate Development</i>	Designing new construction—both infill and greenfield—to be mixed-use, walkable, energy efficient, transit-oriented real estate developments that feature Cleantech and green businesses.
<i>Sustainable Infrastructure Investment</i>	Coordinating investments in municipal and private infrastructure and services (transportation, power, water, waste, communications) in ways that support the development of a sustainable economy.
<i>Large Scale Behavior Change</i>	Motivating citizens at a large scale to reduce their environmental impacts and adopt sustainable buying practices.

Strengthen Local and Regional Supply

Opportunity	Description
<i>Clean Tech Cluster Development</i>	Supporting the development of diverse Cleantech business clusters that provide products, services, and processes that reduce negative ecological impacts, and improve the responsible use of natural resources.
<i>Clean Tech Technology Transfer</i>	Strengthening links with universities and other sources of R&D that can lead to technology transfer and intellectual property commercialization.
<i>Clean And Green Tech Business Support</i>	Focusing business incubation, acceleration, retention, and attraction resources on establishing the city/region as an optimal place for Cleantech and green businesses to locate, expand, and grow over the long term.
<i>Sustainable Finance</i>	Expanding existing and creating new potential investment vehicles that seek financial, social, and environmental return by investing in Cleantech and green businesses and sustainable real estate developments.
<i>Sustainable Branding and Marketing</i>	Branding and marketing of the city/region as an emerging sustainable economy seeking to promote Cleantech and green business and sustainable real estate developments within the city/region.

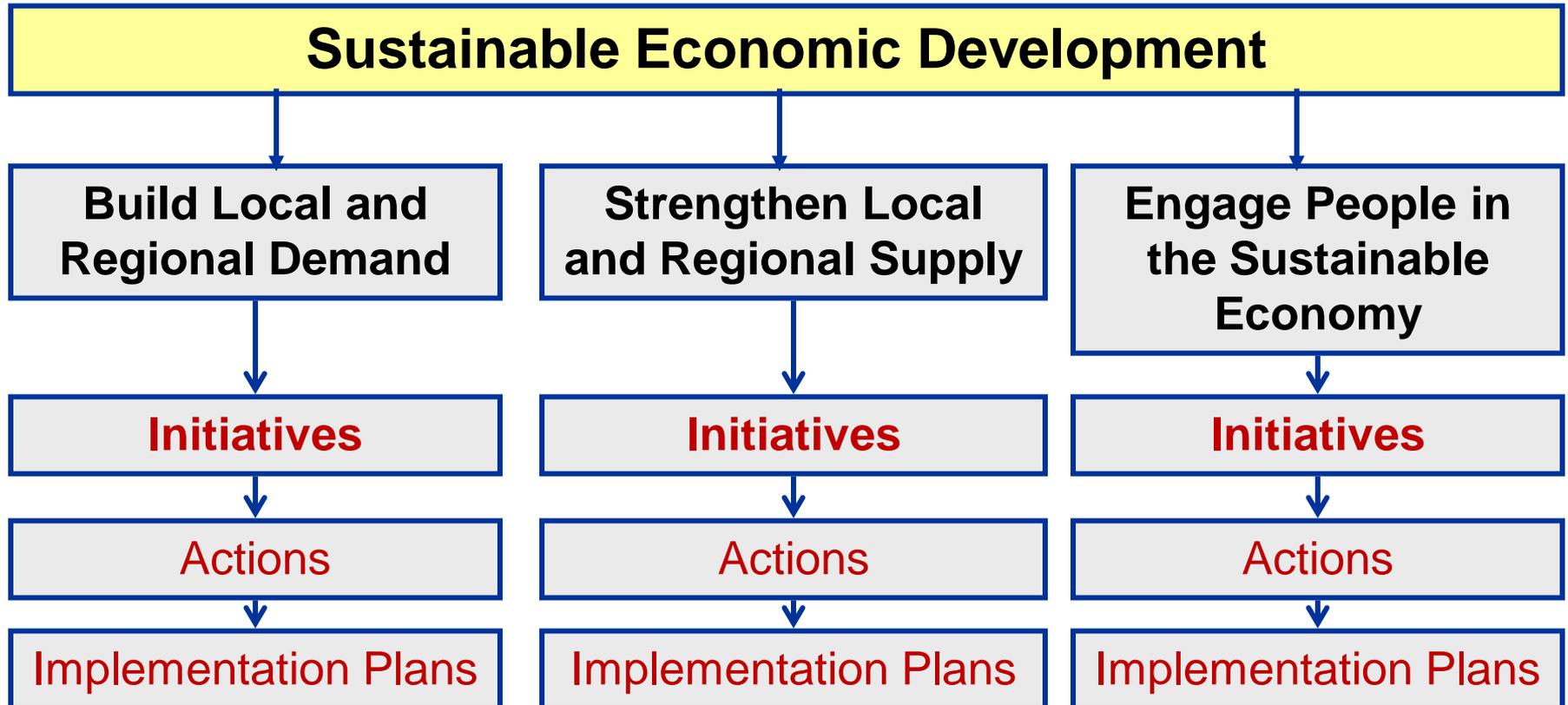
Engage People in the Sustainable Economy

Opportunity	Description
<i>Green Talent Systems</i>	Creating systems and new opportunities for green job development—including education, training, and placement with career pathways—to provide the green workforce, entrepreneurs, and management needed by Cleantech and green businesses, non-governmental organizations, and government agencies.
<i>Sustainable Community Development</i>	Creating opportunities for connecting Cleantech and green businesses and sustainable real estate developments led by minorities, women, and underserved communities with the appropriate finance and business acceleration services and engagement of low- and moderate-income employees and residents in saving money through ecological efficiency.
<i>Sustainable Community Engagement</i>	Engaging the talent and creativity of the residents of a city/region in understanding sustainability, participating in the process of building a sustainable/green economy, and making green purchasing decisions.

7 – Creating Your Sustainable Economic Development Initiatives

Initiatives to Support Your Strategy

Each of the opportunity areas translates into a potential sustainable economic development initiative. Within each initiative, there are multiple kinds of actions that cities and regions can take to structure and implement that initiative. The material on the following pages defines each initiative area, and provides multiple action opportunities within each initiative. This creates a structured “menu” from which you customize your own strategy.



Build Local and Regional Demand

Build Local and Regional Demand

Use policies, incentives, investments and behavior changes to build demand for sustainable practices, products and services.

One of the ways in which sustainable economic development differs from traditional economic development is that cities and regions can play an important role in stimulating demand for sustainable products and services that serve the multiple purposes of:

- Attracting producers to the region
- Encouraging innovation and new business development
- Supporting and advancing national policy

In essence, it means that in order to be a business and market leader in these niches, the local community needs to itself be a “lead user” and implement policies and incentives that show it is serious about “walking the talk.”

It is important to be realistic in this area, however. Business enterprises and clusters cannot be built on local demand alone. That demand must be aligned with larger market trends outside of the local area in order to have a real impact on business development. Local demand can help companies move into the market and refine their business strategies, but they rarely can serve as a platform for robust growth and expansion. That requires producing for markets outside of the local geography and engaging with regional, national and international competitors.

Possible Initiatives

- 1.Sustainable Business Practices.** Improve the sustainability performance of existing businesses.
- 2.Green Building Retrofits.** Improve the environmental performance of existing buildings and drive demand for green building products and practices.
- 3.Sustainable Real Estate Investment.** Increase the supply of walkable, mixed-use, mixed-income, energy efficient, and transit-oriented real estate developments.
- 4.Sustainable Infrastructure Investment.** Coordinate investments in municipal and private infrastructure and services (transportation, power, water, waste, communications) in ways that support the development of a sustainable economy.
- 5.Large Scale Behavior Change.** Mobilize citizens to make sustainable consumer choices.

Sustainable Business Practices

Purpose: To improve the sustainability performance of existing businesses.

Description:

Sustainable business practice initiatives work to establish a regional *system* to assist all companies in improving their performance in all three capitals – financial; natural and human/social. This in turn drives demand for sustainable products and services and organizes the business community around the sustainable economic development agenda.

Actions:

- **Sustainability Reporting and Certification.** Communities can support companies in meeting sustainability reporting requirements, or achieving third party certifications. These can include ISO 14000; the Global Reporting Initiative; and the B-Corp, among others.
- **Local Green Business Certification.** Many communities have developed their own green business certification systems.
- **Green/Sustainable Business Forums.** These are networks of companies that share best practices in sustainability and environmental performance. They will often evolve to take on joint initiatives and projects as well as information sharing.
- **Sustainable Business User Groups.** User groups are small networks of firms that collaborate on the implementation of specific practices. They usually involve 6-8 businesses and are facilitated by someone with expertise in the practice area.
- **Industrial Ecology Analysis.** Also known as “regional resource metabolism assessments”, these projects seek to understand the regional flow of materials to reduce imports; increase exports; and turn waste into resources.
- **Sustainable Supply Chain Management.** This strategy helps companies green their supply chains.
- **Sustainable Extension Services.** Utilizing resources like the Manufacturing Extension Partnership, these strategies provide general technical consulting to companies about how to improve the sustainability of their businesses.

Green Building Retrofits

Purpose: To improve the environmental performance of existing buildings and drive demand for green building products and practices.

Description:

Green building retrofit initiatives work to establish a regional *market* for building retrofitting that improves the environmental performance of the buildings. This strategy both produces “green savings” in the form of reduced occupancy costs; and it stimulates economic development in the building sector.

Actions:

- **Retrofit Intermediaries.** These are separate organizations with the mission of designing and driving a regional retrofit strategy.
- **Customer Interface.** Simplified processes for auditing; contractor management; and performance measurement can reduce transaction costs for consumers.
- **Marketing and Education.** Communities are experimenting with outreach and marketing strategies that increase awareness and acceptance of retrofits as a “product.”
- **Financing.** Customized financing tools can be developed to help owners afford the costs of retrofits. These can include traditional financing; on-bill financing; Clean Energy Assessment Districts; and ESCO financing, among others.
- **Policy Support.** Retrofit strategies can be supported with policies such as energy codes; building energy efficiency labeling; and green requirements for city construction.
- **Workforce Systems.** Retrofit strategies need to be supported with workforce development and career pathways initiatives to build a labor supply that will match demand.

Sustainable Real Estate Investment

Purpose: To increase the supply of walkable, mixed-use, mixed-income, energy efficient, and transit-oriented real estate developments—both infill and new communities—that feature clean tech and green products, services and business enterprises.

Description:

Sustainable Real Estate Development provides a foundation for Sustainable Economic Development. Mixed-use developments provide the spaces within which clean tech and green businesses can operate. The energy and cost efficiencies of green new construction and retrofits of existing buildings can be important sources of savings for green businesses and markets for clean tech businesses. Mixed-use, human-scale, walkable neighborhoods are more attractive to the entrepreneurial talent and workforce needed by clean tech and green businesses.

Actions:

- **Modifications to Planning Code and Zoning.** In many cases, cities need to reform their planning and zoning regulations to permit and encourage sustainable real estate development projects.
- **Urban Land Institute Sustainable Development Panels.** ULI Sustainable Development Panels are an accelerated way to develop recommendations that advance sustainable real estate strategies.
- **Sustainable Opportunity Scans.** Quick scans of the region for sustainable real estate development opportunities can develop a “portfolio” for the city and investors to focus on.
- **Eco-Smart Developments.** Eco-Smart Development aspires to create Eco-Smart Communities that exemplify intensive best practices. They typically utilize environmental preservation zones, energy efficient buildings and transportation, and renewable energy generation to achieve carbon neutrality and even be carbon-negative (taking more carbon out of the atmosphere than they release).

Sustainable Infrastructure Investment

Purpose: To coordinate investments in municipal and private infrastructure and services (transportation, power, water, waste, communications) in ways that model and support the development of a sustainable economy.

Description:

Municipal infrastructure has two potential impacts on business development. First, the quality and cost of services are key to attracting and retaining businesses. Second, these systems are potential sources of sustainable business demand and technology innovation. Regions that are 'walking the talk' on sustainable infrastructure will increase their capacity to be home to business innovators.

Actions:

- **Sustainable Transportation.** There are multiple approaches cities and regions can take to making their transportation systems more efficient and sustainable, including mass transit; car sharing; bus rapid transit; bike sharing; street cars; high speed rail; mobility on demand; and cargo-oriented development.
- **Green Infrastructure.** In many cases, green infrastructure provides a sustainable and cheaper alternative to “gray” infrastructure, especially for management of storm water.
- **Waste Systems.** Municipal solid waste systems provide many opportunities for combining resource efficiency with economic development, including resource recovery business parks that divert landfill wastes as feedstocks for targeted businesses.
- **Renewable Energy.** It is difficult to attract and retain renewable energy companies if the region is not implementing policies to advance those technologies, including Renewable Portfolio Standards; Renewable Energy Certificates; Net Metering; etc.
- **High Speed Broadband.** High speed broadband and energy conservation are highly synergistic. Broadband is increasingly required by state of the art companies for communications and data management, and allows the creation of “smart communities” that reduce travel and transportation.

Large Scale Behavior Change

Purpose: Mobilize citizens to make sustainable consumer choices.

Description:

The emergence of new markets for sustainable products and services ultimately depend on consumers making different choices about what products and services they purchase and how they manage their own resource use. New practices are emerging that hold the potential of large scale change in citizen behavior linked to community sustainability strategies.

Actions:

- **Citizen Empowerment and Voluntary Action.** More communities are experimenting with strategies that use household teams and peer support systems to engage households in large scale voluntary actions to reduce carbon emissions at the household level.
- **Employee Engagement.** Large employers can engage their employees in reducing their carbon emissions. These strategies can accomplish the multiple objectives of improving corporate environmental performance; team building; and reducing household emissions.
- **Social Marketing for Sustainability.** Large scale public information campaigns have proven successful in building awareness motivating behavior change for public health issues like smoking and cholesterol. Similar approaches can be used for climate change using the tools of social marketing.

Strengthen Local and Regional Supply

Strengthen Local and Regional Supply

Support the creation, development, and attraction of sustainable businesses and business clusters.

The core work of sustainable economic development is building the base of sustainable businesses and business clusters in your region. This involves many of the traditional economic development tools of business attraction, retention, and expansion, but also means focusing and refining those tools to target specific kinds of companies – high performing “producers” (clean tech) and high performing “users”, as well as companies that are intentional and deliberate about the building of social and human capital within their enterprises and within the community.

It needs to be emphasized that this part of the strategy has to have a long-term focus to be successful. Strategy time horizons are measured in decades, not years. Significant investments of time, effort, and money can occur before results become apparent.

While marketing “sizzle” can work in the short run, the development of a genuine “sustainability brand” will only happen over the long run, as strategic focus and investment survives the test of time. This long-term focus means it is critical that the support infrastructure for the strategy for a sustainable economic development strategy be in large part insulated from changes in political leadership. This only happens with a strong private and independent sector commitment and ongoing investment.

Possible Initiatives

- 1. Clean Tech Cluster Development.** Encourage the emergence and growth of clean tech business clusters.
- 2. Clean Tech Technology Transfer.** Accelerate the commercialization of innovative intellectual property in your local clean tech cluster.
- 3. Clean and Green Tech Business Support.** Promote the city, community, or region as an optimal place for clean tech and green businesses to locate, expand, and grow over the long term.
- 4. Sustainable Finance.** Increase the availability of specialized investment capital that is targeted to sustainable and clean tech businesses and business opportunities.
- 5. Sustainable Branding and Marketing.** Brand your region as a emerging sustainable economy with a coherent sustainable development agenda and distinctive competence.

Clean Tech Cluster Development

Purpose: To encourage the emergence and growth of clean tech business clusters.

Description:

A Clean Tech Cluster strategy uses the approach of business cluster development to encourage the emergence of and/or the strengthening of a clean tech business cluster in a city, community, or region.

Actions:

- **Clean Tech Cluster Study.** This analysis forms the basis for any cluster strategies. It identifies the businesses in the cluster; their relationships with each other; the required specialized inputs and support mechanisms; and opportunities for cluster development.
- **Clean Tech Networks.** Clean Tech networks bring together the key players in the clean tech cluster (business owners; entrepreneurs; utilities; investors; service providers; academic and R&D institutions; and government agencies) to share best practices with each other; contribute to the design of clean tech initiatives; and develop joint projects.
- **Clean Tech Business Acceleration.** A business acceleration program helps companies grow “faster and smarter” – increasing income while increasing positive environmental and social benefits. It involves a “networked incubator” structure to assess business plans; provide consulting support; link to markets and customers; and link to investors.
- **Clean Tech Business Recruitment.** Business attraction resources are tightly targeted to firms that bring complementary technologies and markets to existing cluster players and fill out “gaps” in the cluster.

Clean Tech Technology Transfer

Purpose: To accelerate the commercialization of innovative intellectual property in your local clean tech cluster.

Description:

A Clean Tech technology transfer strategy links local firms and entrepreneurs to sources of intellectual property and R&D expertise. These initiatives link cluster members to universities, private and public labs, and each other to facilitate technology transfer and commercialization.

Actions:

- **Intellectual Property Mining.** An IP mining strategy creates a systematic process for locating and assessing source of intellectual property with commercial potential for a clean tech sector. It can be done by a third party or through an industry consortium.
- **Industry R&D Consortia.** These enterprises create a collaborative structure for companies to pursue joint applied R&D projects that reduce the risk to each individual enterprise. There are multiple examples of these in the manufacturing sector.
- **IP Networks.** IP networks establish protocols to allow companies to make their underutilized intellectual property visible to each other, and accelerate its commercialization through licensing or other contractual arrangements.
- **Vertical Inventor Networks.** Inventor networks like The Big Idea Group broker relationships between inventors and commercialization partners. These can be customized to a “vertical” or specific industry sector.
- **Research Institutes.** Partnerships with universities and federal labs can support the creation of applied R&D institutes focused on specific clean and green technologies.

Clean and Green Tech Business Support

Purpose: To promote the city, community, or region as an optimal place for clean tech and green businesses to locate, expand, and grow over the long term.

Description:

A sustainable business development strategy focuses the traditional tools of business attraction, retention, and development on targeted sustainable business sectors.

Actions:

- **Sustainable Business Recruitment.** Business recruitment needs to be refined and focused on those sectors that the region believes that it has a competitive advantage in. This requires a much more strategic approach to identifying and recruiting companies than is often pursued by local economic development organizations.
- **International Recruitment.** It is often necessary to reach out to foreign markets to identify leading candidates for attraction, particularly in renewable energy and other efficiency areas where China, the EU and other markets have an edge over the U.S. This kind of strategy is best executed in cooperation with State and Federal partners.
- **Sustainable Business Assistance Centers.** Sustainable Business Assistance Centers customize business services to the practice of sustainable business. This will often require specialized expertise that cities and regions don't have.

Sustainable Finance

Purpose: To increase the availability of specialized investment capital that is targeted to sustainable and clean tech businesses and business opportunities.

Description:

A Sustainable Business Finance strategy assures that there are specialized investment sources across the full spectrum of finance – angel; seed; venture capital; mezzanine; growth capital; and traditional debt financing.

Actions:

- **Green Finance Network.** A Green Finance Network is a regional investment network made up of banks, venture funds, real estate funds, angel investors, banks, insurance intermediaries, pension funds and other investors interested in green equity options.
- **Green Investment Fund.** Many communities have developed their own private equity and loan funds specifically targeted at sustainable real estate development or clean tech and green businesses. To be successful, these funds require adequate geographic scope to support deal flow; multiple national and regional investors; and professional fund management.
- **Green Bond Mechanisms.** A Green Bond Mechanism can take either the form of a tax-exempt bond or a taxable bond. Green Bonds can be used to finance retrofit programs for residential, commercial, industrial, and public buildings and construction of facilities for green and clean tech businesses.

Sustainable Branding and Marketing

Purpose: To brand your city/region as an emerging sustainable economy with a coherent sustainable development agenda and distinctive competence.

Description:

A Sustainable Branding and Marketing campaign develops messages; communication channels; and media to raise its visibility as a leading sustainable economy player.

Actions:

- **Identity Development.** The city/region needs to develop a distinctive identity that goes beyond the “we’re green” or “we’re sustainable” message. It needs to have a compelling story about the place and how it is unique.
- **Message Development.** Focused messages about the city/region need to be developed and adopted across multiple organizations.
- **Audience Targeting.** The city/region needs to identify the key audiences it wants to influence, and what kinds of messages they listen to and communications channels they participate in.
- **Communication Channels.** A wide variety of communications channels – news services; Internet blogs; television; radio; and print media – are used to send a consistent message to key audiences.
- **Event-Based Marketing.** Specific events, such as sustainable economy conferences, trade shows, and expositions, can be used to advance the city/region’s image as “a place to be” in the sustainable economy market.

Engage People in the Sustainable Economy

Engage People in the Sustainable Economy

Build skills for the sustainable economy and engage communities in the process.

A sustainable development strategy will require a long-term approach to building new career pathways and related skills to support sustainable business sectors. In addition, it is essential that the strategy be connected to citizens, neighborhoods, and disadvantaged populations in a broad and deep way.

The sustainable economy affects skill demand in several ways:

- Many existing jobs will require new skill sets.
- New occupations and related skill certifications will be created.
- New career pathways (linking sequential occupations) will emerge.

It is important to pace new skill development with actual demand – if demand exceeds supply, it will negatively affect the competitiveness of enterprises. Equally, if supply is prematurely developed without effective demand, it will waste resources and discourage people from seeking careers in this niche.

Traditional economic development often bypasses historically disadvantaged populations and neighborhoods. To be consistent with the “triple bottom line” or “integrated bottom line” approach, sustainable economic development needs to be focused on increasing the number and market share of locally-owned and socio-culturally diverse businesses that are anchored in local neighborhoods.

Finally, an engagement initiative will use multiple actions to educate and involve citizens in building the sustainable economy.

Possible Initiatives

- 1.Green Talent Systems.** Stimulate the creation of the trained and job-ready green workforce and the well-educated green entrepreneurial and managerial capacity needed to power the transformation to a sustainable economy.
- 2.Sustainable Community Development.** Connect the benefits of resource conservation and sustainable economic development to local communities and disadvantaged populations.
- 3.Sustainable Community Engagement.** Engage the residents of a city, community, or region in understanding sustainability, participating in the process of building a sustainable economy, and making green purchasing decisions.

Green Talent Systems

Purpose: To stimulate the creation of the trained and job-ready green workforce and the well-educated green entrepreneurial and managerial capacity needed to power the transformation to a sustainable economy.

Description:

A Green Talent System aligns the skill needs of the marketplace with talent suppliers through well defined career pathways.

Actions:

- **Green Jobs Analysis.** This analysis does a comprehensive review of the current and forecasted green jobs; market segments that will drive demand, and the occupational categories and career pathways that are associated with them. (This includes analysis of the job impacts of local sustainability and/or climate mitigation plans and strategies.)
- **Green Career Pathways.** This action defines the “career pathways” for highest demand green jobs – skill standards; required certifications; and skill development progressions (credit and non-credit). It includes creation of career advising strategies for green careers.
- **Capacity Analysis.** This assessment measures the capacity of regional education and workforce development providers to meet the career pathway demand – both qualitatively and quantitatively. It includes an inventory of all existing programs.
- **Sustainable Business Education.** Sustainable business education programs can be created at local higher education institutions, including green entrepreneur programs.
- **Overall Green Jobs Strategy.** Development and implementation of the strategy is best done with a city/regional leadership team and will require a funding strategy and selection of workforce intermediaries.

Sustainable Community Development

Purpose: To connect the benefits of resource conservation and sustainable economic development to local communities and disadvantaged populations.

Description:

A Sustainable Community Development initiative takes a proactive approach to localizing the benefits and connecting them to minorities, women, and underserved communities. It also engages low- and moderate-income employees and residents in saving money through ecological efficiency.

Actions:

- **Economic Localization.** Localization strategies seek to strengthen and diversify local economies by developing localized networks for economic exchange and increase the total number and market share of locally owned, socio-culturally diverse and neighborhood- and community-based businesses.
- **Neighborhood and Community-Based Economic Development.** The sustainable development strategy can be used to spur community and neighborhood-level economic development and redevelopment in ways that bring employment and income benefits to residents on an inclusive basis.
- **Green Capital Connections Program.** This action seeks to develop the ability of minority and women-owned businesses to participate in sustainable market supply chains.
- **Equity Express Program.** Equity Express helps low income households reduce their cost of living by systematically applying principles of ecological efficiency to their household practices and consumption patterns around energy, water, transportation, food, telecommunications, and information technology.

Sustainable Community Engagement

Purpose: To engage the residents of a city, community, or region in understanding sustainability, participating in the process of building a sustainable economy, and making green purchasing decisions.

Description:

Through a Sustainability Community Engagement Initiative, a place can define itself as a sustainable city, community, or region, and residents, businesses, community organizations, and government agencies can create an area-wide culture of sustainability that reduces costs, obtains financial benefits, and contributes to a prosperous economy, while contributing to the environmental and social health of the city, community, or region.

Actions:

- **Green One-Stop Center.** A One-Stop center creates a centralized source of information for citizens to obtain information about the region's sustainability strategies and how they can participate in them. (In some cases One-Stop Centers are created for specific initiatives, such as building retrofits.)
- **Sustainability Education.** Education initiatives seek to integrate knowledge about sustainability and the sustainable economy in K-12 schools, adult education, and community colleges.
- **Sustainable Economy Dashboard.** Many communities already have sustainable indicator initiatives, and these can be customized to reflect the sustainable economic development outcomes.
- **Sustainability Communications.** A communications strategy will build off of the region's marketing and branding platform, and will incorporate multiple ways of sharing information, including web sites and an annual Sustainability Report.
- **Sustainable Economy Conference and Exposition.** An annual Building a Sustainable Economy conference and exposition provides an opportunity to bring together regional leaders and citizens to discuss trends and challenges, showcase progress, and enable area enterprises to exhibit their products, services, and programs.

Summary Graphic of Initiatives and Actions

Putting It All Together

Sustainable Economic Development

Build Local/Regional Demand

Use policies, incentives, investments and behavior changes to build demand for sustainable products and services.

- **Sustainable Business Practices**
 - ✓ Sustainability Reporting & Certification
 - ✓ Local Green Business Certification
 - ✓ Sustainable Business Forums
 - ✓ Sustainable Business User Groups
 - ✓ Industrial Ecology Analysis
 - ✓ Sustainable Supply Chain Management
 - ✓ Sustainable Extension Services
- **Green Building Retrofits**
 - ✓ Retrofit Intermediaries
 - ✓ Customer Interface
 - ✓ Marketing and Education
 - ✓ Retrofit Financing
 - ✓ Retrofit Policy Support
 - ✓ Workforce Systems
- **Sustainable Real Estate Development**
 - ✓ Planning Code and Zoning Modifications
 - ✓ ULI Panels
 - ✓ Sustainable Opportunity Scans
 - ✓ Eco-Smart Developments
- **Sustainable Infrastructure Investment**
 - ✓ Sustainable Transportation
 - ✓ Green Infrastructure
 - ✓ Waste Systems
 - ✓ Renewable Energy
 - ✓ High Speed Broadband
- **Large Scale Behavior Change**
 - ✓ Citizen Empowerment and Voluntary Action
 - ✓ Employee Engagement
 - ✓ Social Marketing for Sustainability

Strengthen Local/Regional Supply

Support the creation, development, and attraction of sustainable businesses and business clusters.

- **Clean Tech Cluster Development**
 - ✓ Clean Tech Cluster Study
 - ✓ Clean Tech Networks
 - ✓ Clean Tech Business Acceleration
 - ✓ Clean Tech Business Recruitment
- **Clean Tech Technology Transfer**
 - ✓ Intellectual Property Mining
 - ✓ Industry R&D Consortia
 - ✓ IP Networks
 - ✓ Vertical Inventor Networks
 - ✓ Research Institutes
- **Clean And Green Tech Business Support**
 - ✓ Sustainable Business Recruitment
 - ✓ International Recruitment
 - ✓ Sustainable Business Assistance Centers
- **Sustainable Finance**
 - ✓ Green Investment Funds
 - ✓ Green Bond Mechanisms
 - ✓ Green Finance Networks
- **Sustainable Branding and Marketing**
 - ✓ Identify Development
 - ✓ Message Development
 - ✓ Audience Targeting
 - ✓ Communication Channels
 - ✓ Event-Based Marketing

Engage People in the Sustainable Economy

Build skills for the green economy and enroll communities in the process.

- **Green Talent Systems**
 - ✓ Green Jobs Analysis
 - ✓ Green Career Pathways
 - ✓ Capacity Analysis
 - ✓ Sustainable Business Education
 - ✓ Green Jobs Strategy
- **Sustainable Community Development**
 - ✓ Economic Localization
 - ✓ Neighborhood and Community-Based Economic Development
 - ✓ Green Capital Connections Program
 - ✓ Equity Express Program
- **Sustainable Community Engagement**
 - ✓ Green One-Stop Centers
 - ✓ Sustainability Education
 - ✓ Sustainable Economy Dashboard
 - ✓ Sustainability Communications
 - ✓ Sustainable Economy Conference and Exhibition

Conclusion

- A Sustainable Economic Development Strategy can guide residents of the city, community, or region in evolving a culture of stewardship, innovation, and action that can lead to prosperity, satisfaction, and inspiration.
- A regional culture of innovation for sustainability is increasingly becoming one of the criteria that businesses use to make location decisions.
- A Sustainable Economic Development Strategy will provide guideposts on the way to the full realization of the promise of the Sustainability Revolution. It can help create a place that residents will be proud to hand to their children and their children's children.