
Building Community Prosperity

through Natural Capitalism

Every community has untapped potential that can create living-wage jobs, plus increased income, business, and saving. Listed below are dozens of ways communities are tapping this potential today through Natural Capitalism. Many of these actions are well known, others innovative. They distribute benefits widely across the community and they're compatible with the environment. Most require little or no community expansion. While not all apply to every community, the length of this list highlights the undeveloped wealth-generation power in virtually every community.

Often, community development decisions are made behind the scenes. In contrast, Natural Capitalism is most effective when people from all walks of life choose their community's future collaboratively and base their choices on practicality and compatibility with the community and its environment.

I. Invest in Resource Productivity by “plugging the leaks”

A local economy might be compared to a bucket that the community would like to keep full. Business recruitment and community expansion are attempts to pour more money into the bucket. While these strategies may have succeeded in the past, today they often fail or generate more costs than benefits to the community.

Focusing entirely on more ways to fill the bucket ignores vast opportunities for “plugging leaks.” Economic buckets invariably have holes through which pounds or dollars leak every time local resources are used inefficiently. Smart communities seek profitable ways to keep the bucket full by plugging unnecessary leaks through one of more of the techniques listed below. As a result their economies are more resilient and less vulnerable to the influences of the global economy.

This strategy is good news for communities that have little hope for expansion. It's equally encouraging for those in which expansion is creating problems. Instead of relying on the hope of continuous expansion, that is also imposing large costs, rapidly expanding communities now have many alternatives.

As you read the following examples, think about similar or quite different ways to plug your community's leaks. (For more business examples, see Rocky Mountain Institute's new book *Natural Capitalism* or its website www.naturalcapitalism.org.)

1. Energy efficiency programs create local jobs and save millions of dollars in any community. Sacramento CA, invested \$59 million to save electricity. This enabled utility customers to save nearly that same amount. The

- program created 880 direct jobs, and increased regional income by \$124 million. Though energy is a small portion of total costs, saving energy will provide a significant contribution to profits and economic progress. See <http://finder.rmi.org> for ways to plug energy leaks in your community.
2. Local ownership increases the wealth-creating power of each local transaction. Land trusts, co-ops, and employee stock ownership can ensure permanent local ownership of many businesses by buying local buildings and renting only to residents (at cost). Example: The Green Bay Packers are owned by a corporation whose majority stockholders are from Wisconsin.
 3. Import substitution replaces “imports” with local products and services. Simple example: Locally bottled water in Tropic, Utah, replaced imports and established a new business.
 4. Local sourcing links local-business buyers with local suppliers. An early program in Eugene, Oregon, created 100 jobs in its first year without any physical expansion of the city.
 5. Water efficiency: The grassroots Mothers of East Los Angeles marketed a low-flush-toilet retrofit program that installed 270,000 toilets in three years, returned \$4 million to the neighborhoods in jobs, water-bill savings, and community programs, and saves over 3.4 billion gallons of water every year.
 6. Downtown revitalization reduces economic leakage, builds pride, encourages infill, preserves culture, celebrates history, reuses resources, and reduces traffic.
 7. Entrepreneurial training: Since 1993, the Nebraska EDGE training courses have assisted more than 1,250 individuals, entrepreneurs, small business owners and their partners start and improve their businesses.
 8. Community supported agriculture: CSAs are local farms that increase productivity, reduce costs, and sell specialty crops direct to consumers and restaurants.
 9. Business mentoring: Veteran business people “adopt” start-up businesses—giving rookie proprietors someone to talk with when things go wrong, helping them understand and avoid pitfalls. Such programs significantly reduce the high failure rate of start-ups.
 10. Community cash flow can be captured through such community enterprise as locally based credit cards, debit cards and phone service. South Orange, New Jersey’s municipal credit card funds downtown revitalization.
 11. Local currency: Ithaca, New York’s currency is accepted by 1,200 business and can’t be spent out of town.
 12. Microcredit: Many low-income or impoverished people have the skills, but lack the credit to start a business. Tailored to very small, often home-based, start-up businesses, micro-loans are too small for conventional banks. Usually offered by nonprofit organizations in conjunction with basic business training, microcredit often provides a way out of poverty and off of welfare.
 13. Business "visitation" programs enlist local leaders to visit

businesses to determine needs and concerns. Proprietors get the chance to offer suggestions to local governments and organizations regarding changes that could benefit local business.

II. Shift to Biologically Inspired Economic Models (Biomimicry)

In the economic climate of the 21st Century, competitiveness requires lean business practices that, like biological systems, reduce and eventually eliminate waste. To be competitive, communities must pursue development strategies that analyze local material, energy, and waste streams; identify business opportunities; and match those opportunities with local businesses. Multiple benefits include more businesses and jobs, reduced resource inputs (and, therefore, lower costs), prolonged life of the local landfill, and reduced pollution. The transition to bio-entrepreneurship has begun:

14. Waste matching (or industrial symbiosis): Computer networks can make virtual industrial ecosystems by matching waste with potential buyers; examples under development include numerous state programs such as New Hampshire and Michigan. ReMaDe in Essex, England is a five-year project to create new markets and secondary uses for recycled materials.
15. Building salvage—Rather than demolish a building, dismantle and reuse its components. Southern California Gas saved \$3.2 million or 30% of construction costs on an office and education building by partly dismantling and reusing an existing building. The finished building was 80% made of recycled materials, keeping 350 tons of material out of the landfill.
16. Remanufacturing creates businesses and jobs and reduces resource inputs. This new “industry” is now larger than the steel industry. In Telford, England, old Ricoh photocopiers are reconditioned instead of being dumped in landfill sites. 90% of parts are reused.
17. Advanced business retention and expansion programs mimic biological systems by enhancing adaptation, competition, inter-relationships, and information flow. Littleton, Colorado’s program created jobs at six times the rate of its earlier recruitment efforts by offering such services as problem research, competitor analysis, industry trend monitoring, video conferencing, training, and market mapping. Such local policies enhance quality of life and intellectual infrastructure.
18. Flexible business networks: Several small businesses partner bid on contracts too big for any one of them, not unlike coyotes who usually hunt on their own, but run in packs when seeking larger game.
19. Storm-water capture saves money, recharges groundwater, and reduces pollution by helping rain soak in the ground where it falls rather than collecting it into expensive centralized systems, which, in some areas, overwhelms sanitary sewage systems resulting in significant pollution. (Example: Permeable parking lot material.)

III. Reinvest in Natural Capital

Everyone knows that living systems provide us with *products*—such essential natural resources as oil, water, trees, fish, soil, and air. Living systems also provide us with equally essential *services*. These ecosystem services include:

- Cooling (shade trees)
- Flood control (root systems)
- Purification of water and air (wetlands)
- Storage and recycling of nutrients (roots)
- Sequestration and detoxification of human and industrial waste (wetlands and ground filtration)
- Pest and disease control (by insects, birds, bats, and other organisms)
- Production of grasslands, fertilizers, and food
- Storage and cycling of fresh water
- Formation of topsoil and maintenance of soil fertility

These services are essential to doing business (and maintaining human life). Worldwide, however, these services are declining. Many of them have no known substitutes at any price. The future's strongest competitors will be businesses and communities that recognize these facts and invest accordingly:

20. Restore natural ecosystems: In Port Angeles, Washington, an estuary restoration project is saving the local lumber mill \$150,000 yearly through more efficient logistics. It created space for expanding the mill and improved the town's tourism.
21. Create urban ecosystems: Supported by these systems, birds, bats, and frogs eat pesky insects. Also, property values increase, for example near San Francisco's Golden Gate Park, by \$500 million

to \$1 billion, which generates an additional \$5-\$10 million in property taxes. In inner city South Central Los Angeles, a park restored from an old industrial site is "like a grain of sand in an oyster, creating an economic development pearl."

22. Foster Eco-tourism to create local jobs while protecting important environmental values.
23. Maintain wetlands for waste treatment, storm-water retention, and wildlife habitat. Arcata CA restored 154 acres of wetlands and used it to treat City wastewater. The resulting marsh is now a wildlife habitat in which salmon are reared. The cost was a fraction of the costs for a conventional energy-intensive wastewater treatment system. One researcher estimated the economic benefits generated by single acre of wetland: at \$150,000 to \$200,000. Barns Elms reservoirs near London, England have been transformed from 43 hectares of concrete basins into diverse wetlands, which attract visitors.
24. Maintain watersheds for flood control and drinking water.
25. Protect and enhance vegetative cover.
26. Protect ground water from chemical contamination.
27. Restore aquatic habitat.
28. Reduce carbon dioxide emissions: Through energy and water efficiency in city operations, Regina, Saskatchewan reduced its CO2 emissions by 10% while saving \$393,000.

Note: The list of ecosystem services on the previous page does not include such services as noise abatement and peaceful sanctuary because some may regard them as non-essential. Neither does it include such services as climate stabilization, protection against harmful cosmic radiation, distribution of fresh water, and regulation of the chemical composition of the atmosphere because

some may argue that the depletion of these services is caused by factors too distant for community action. However, an increasing number of communities and businesses are implementing policies to make themselves “climate neutral” because doing so will save money and enhance shareholder value.

Building Community Capacity

Leaders can help their communities take charge of the future and be a part of the new economy. Alternatively, they can try to keep decisions to themselves, publicly attack people who discuss innovative ideas and, in so doing, allow their communities to be tossed by the winds of rapid change. Those who choose the first option develop Natural Capitalism.

How can a community implement Natural Capitalism? How does it start on the road to a more sustainable development strategy? These and other questions are explored in the companion text, “Framework for Community Sustainability.”

Business Believes in Natural Capitalism

Don't be surprised if Natural Capitalism sounds unfamiliar. The book describing it came out only recently. But already its ideas are being adopted by business. Here's what corporate leaders are saying:

"Your book is hugely important and ought to be on the nightstand of every CEO."

— Thomas Petzinger Jr, Millennium Edition Editor the Wall Street Journal

"As the industrial arm of modern society's larger body struggles to come to terms with the mounting evidence of the damage it is inflicting on the body itself and the body's home, Earth, Natural Capitalism provides some crucially important guidance. Looking for available philosophical starting point? Here it is. Looking for hard evidence to validate that philosophy? Here it is. Looking for peace of mind? Start here."

— Ray C. Anderson, Chairman and CEO, Interface, Inc.

"Three of the world's best brains have... created a work that future historians may look back upon as a milestone on our way to a new, sustainable economy. In this book you will find a wealth of constructive, forward-looking ideas and suggestions, based on solid scientific research."

— Tachi Kiuchi, Managing Director of Mitsubishi Electric Corporation, Chairman of the Future 500

"This book is a 'must read' for those leaders in government and business who do not believe that sustainability is necessary or practical. It shows both the need and the way to all those who are not yet ready to do what we must do to leave a livable world to our grandchildren."

— Murray Duffin, Vice-president Total Quality and Environmental Management, STMicroelectronics

Published Resources:

Natural Capitalism, Creating the Next Industrial Revolution

by Paul Hawken and Amory Lovins and Hunter Lovins.

The new book describes innovative principles and practices for increasing *competitiveness* in ways that reduce waste and increase productivity. A summary article that appeared in the June Harvard Business Review can be found at www.naturalcapitalism.org. 396 pages. \$26.95

Green Development: Integrating Ecology and Real Estate

by Wilson, Uncapher, McManigal, Lovins, Cureton, and Browning

Describes an exciting new field where environmental considerations are viewed as *opportunities* to create fundamentally better buildings and communities. 522 pages. \$61.00

Economic Renewal Guide: A Collaborative Process for Sustainable Community Development.

by Michael Kinsley

This field-tested manual describes how a few energetic people can help steer their community toward development that's sensitive to local values and the environment. 225 pages \$17.95

Taking Sustainable Cities Seriously: Economic Development, the Environment, and Quality of Life in American Cities

by Kent E Portney, 284 pages, MIT Press, Cambridge MA

Communities by Choice: An Introduction to Sustainable Community Development

by Mountain Association for Community Economic Development, Berea KY, \$1.00

Going Local: Creating Self-Reliant Communities in a Global Age

by Michael Shuman

Details how dozens of communities are gaining control over their economies by investing in locally, replacing imports, and by working to eliminate many subsidies and changing tax and trade laws that disempower communities. 270 pages. \$25.00 Free Press

Real Towns: Making Your Neighborhood Work

By Harrison Bright Rue and the Local Government Commission

Gives local leaders the tools needed to apply the "New Urbanist" principles of traditional neighborhood design to their communities.

Web Resources:

American Planning Association
www.planning.org

Center for Excellence in Sustainable Development
www.sustainable.doe.gov

Center for Compatible Economic Development
www.cced.org

Center for Livable Communities
www.lgc.org/clc

Citizen Planner Institute
www.citizenplanner.com

Communities by Choice
www.communities-by-choice.org

EDGE Program, University of Nebraska
www.nebraskaedge.unl.edu

Growth Management Institute
www.gmionline.org

Littleton, Colorado Business Retention Program
www.littletongov.org/bia/economicgardening

Natural Step
www.naturalstep.org

Port Angeles, Washington
www.portofpa.com/citizenship

Remanufacturing Industries Council
www.remanufacturing.org

Renew America
www.solstice.crest.org/environment/renew_america

Sonoran Institute
www.sonoran.org

Sprawl Watch Clearinghouse
www.sprawlwatch.org

Urban Images Envisioning Smart Growth
www.urban-advantage.com/index.htm

Zero Emissions Research Initiative
www.zeri.org

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