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# ecocities

Rebuilding Cities in Balance with Nature

REVISED EDITION

Richard Register



NEW SOCIETY PUBLISHERS

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## CHAPTER

# Plunge on in!

### **Four Steps to an Ecology of the Economy: Map, List, Incentives, People**

Economics and politics are actually one seamless continuum — the engine of productivity together with the rules of its functioning, including who benefits and who pays. Those rules are called natural laws and human policies. This whole system is made up of plants and animals recycling and rearranging the raw elements of solar and mineral wealth, eating one another and evolving on behalf of each individual, each species, and all of life. As if this weren't complicated enough, human beings work on behalf of families, religions, ethnic groups, professions, cities, nations, alliances of nations, and the United Nations as well as self, species, and the one and all of life in the universe. We seem to be so diverse in our deeper selves that each of us works for a different mix of those constituencies, some-

times forgetting one or more altogether. Yet we are always building that edifice that supports us all, our civilization, which is made up of all our cities and physical systems functioning according to rules we made up ourselves, based in turn on the rules of nature. Given the order, with the human edifice built upon the natural one, it is clear that if our rules differ markedly from nature's, we are likely to run into problems.

Therefore some basics prevail. As Thomas Berry says, nature's economics are primary, humanity's economics derivative. Chérie Hoyle of Urban Ecology Australia puts it tersely, "No ecology, no economy. No planet, no profit." According to Hazel Henderson, the pioneering economist and futurist, the economy can be graphically represented by what she calls her "cake chart," a take-off on the pie charts economists use tirelessly to

express percentages of this and that.<sup>1</sup> The top layer of the cake is the “private” sector: production, employment, consumption, investment, savings. The next layer is the “public” sector: infrastructure, schools, municipal government, and various services. The third layer down is the underground economy including tax dodges, black market exchanges, and the like. Beneath these three “monetized” layers, in which cash is used as a means of valuation and exchange, is the non-monetized layer, based on bartering, home-based production, subsistence farming, “sweat equity,” and what she calls the “love economy” of volunteerism: working to support the family and friends with vegetables, cleaning, baby sitting, medical advice, and so on. This base layer of the human economy rests, in turn, on the bottom layer of the cake, nature’s economy: the natural “resource base,” which not only ultimately provides everything basic to the human need for sustenance but also serves at no cost to clean up our messes if we don’t get too far out of hand.

Since economics deals in the proportional valuation of resources, goods, and services for the purpose of exchange, use, savings, and investment, it is inevitably based on numbers. The most basic of numbers essential to the economy are the following: Humans “appropriate 40 percent of the planet’s organic matter produced by green plants,” says Erward O. Wilson.<sup>2</sup> And if the oceans are included, humanity takes approximately 25

percent of *all* solar energy-powered biomass production. Only three percent of all mammals, birds, reptiles, and amphibians on Earth’s surface (in terms of biomass) are wild; the other 97 percent are here solely to serve us. In biomass, we humans *are* about a hundred times the size of the runner-up species in our size range on Earth in all its history. These are the basics about the foundation layer of the economic cake.

Jared Diamond in *Collapse: How Societies Choose to Fail or Succeed* as well as in his earlier book *Guns, Germs, and Steel*<sup>3</sup> makes a convincing case for what he denies is environmental determinism, that is, the overriding power of the economy of nature — nature’s economics being “primary,” society’s being “derivative,” to use Thomas Berry’s terms. In addition to environmental influences in the rise and fall of societies, Diamond throws in human cultural factors in explaining those culturally all-encompassing ups and downs. But let’s face it, the flows of energy from sun to soil, food, and wood to rain, and the temperature of the air have repeatedly sunk culture after culture with blind spots to what should be the obvious massive flows of energy and material that constitute our main environmental conditions. In our economics in the early 21st century, the 800-pound gorilla is the car/sprawl/freeway/cheap-energy city. This is the real economy drawing down not only most of the biosphere’s solar energy for exclusive human benefit but also the fossil

fuel savings account of the whole planet in an evolutionary blink of the eye. And almost no one but you and I know it! Not even E.O. Wilson who I talked to about it personally, drawing only a blank expression. I feel like some incredulous citizen of Easter Island in the history so well related in *Collapse* screaming, “You idiots! How can you be cutting down the last trees on our island to build those bizarre giant statues? Don’t you know we need trees for houses, boats, and fire?” Today those bizarre giant statues are sprawl cities. That’s the real economy.

Let’s turn now to how things are distributed within our species: about 20 percent of us have about 80 percent of the resources at our disposal and the other 80 percent have about 20 percent. Actually, there are wildly varying estimates, but you get the idea. Things are a bit out of balance among us humans as well as between us and the other species. If we believe in democracy and justice, then we need a frontal assault on cold, greedy, heartless values. And we have to stop taking refuge in staying culturally lazy and comfortable with the *status quo*, like the Easter Islanders sticking with their wise cultural traditions. Like theirs, but more so, our sacred *status quo*, our “unnegotiable life style,” to quote George W. Bush, is hurtling along and anything but static. What is, and is accepted, is not necessarily what’s going to save us, or, as Einstein said, you can’t solve the problem with the same thinking that created

the problem. Though ecocity building can’t solve the problems of greed and lazy self-congratulatory acceptance of our culture as the great one all cultures have thought themselves to be, it can help by giving us a means to run the whole society on a small fraction of today’s demand for land, materials, energy, and other living creatures. Perhaps, then, being frugal and considerate in its very conception, structure, and functioning, it can help create a climate of frugality and respect for life processes.

The clearest expression of a strategy to build ecocities and the kind of society they would make possible and at the same time one of the best descriptions of how such an economics would work is contained in what I call “Four Steps to an Ecology of the Economy.”

*First*, the map. We need to determine what goes where. We need to draw up an ecocity zoning map — a map of the city’s anatomy, its land use and infrastructure. We need to plot the areas to be developed for density and diversity, the future walkable centers, based mostly on existing lively centers. We need to identify the areas in which to restore nature and agriculture, the zones farthest from those centers and therefore the most dependent upon cars. We can undertake this mapping exercise knowing full well that it will need revision and refinement as we consider the many variables of any town. As Jaime Lerner, three-term mayor of Curitiba, Brazil,

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counsels us, we can't wait until we have all the answers, because if we do that, we will wait forever. Waiting for perfection or certainty is an excuse for inaction. We have to plunge in and expect to make adjustments along the way. Once we have a good map, we will have a much clearer idea of all the details that follow. This map is the indispensable first step in "the builder's sequence." True, we can say to ourselves, "Reinforce the centers with higher-density pedestrian-balanced development and withdraw from automobile dependent areas and important once-natural features." But it's much clearer to have it also on paper.

*Second*, the list. We need to develop a list of technologies — those required for constructing mixed-use buildings and solar technologies; for producing bicycles, streetcars, and rail stations; for building greenhouses and rooftop and organic gardens, and so on — businesses, and jobs that, based on the ecocity zoning map, will contribute to a vital economy. Not taking this crucial step helps explain why we have been winning so many battles and still losing the war.

With the map and the list of technologies, businesses, and jobs, a vision and ways to build the ecocity are coming into focus. The map and list give us some clarity about what we need to educate ourselves for if we are going to have a healthy future. They create a context and a means for evolution toward a more creative, compassionate relationship between society and nature. They lay out

where everything fits in the physical communities, what products, services, technologies, businesses, and jobs are required, and where they best fit.

True, there are many things that don't relate directly to building. A *second* category on our list, "Part B," we might say, contains all those technologies, businesses, and jobs that create products and services that are not particularly related to city structure but that are relatively healthy in their own right — recyclable or biodegradable, energy conserving, non-toxic. These serve us in providing healthy food, clothing, medicine, information products, and services.

*Third*, the incentives. We need to rewrite the "incentives package." The present car/sprawl/freeway/oil system is viable only because a long list of incentives, including enormous subsidies, supports it. It is regulated into existence. We need a new set of incentives to make it profitable to build a society at peace with nature. Developing the laws and policies, ordinances, codes, regulations, taxes, fines, grants, contracts, loans, and leases to support the community defined by the ecocity maps and animated by the businesses that build and maintain the ecocity civilization will make it so. Without the proper incentives it can't happen. A whole culture of support needs to be created here and expressed in such incentives. An ecocity civilization ultimately needs the imagination and support of people everywhere creating

the incentives that make it possible to switch from one list of technologies and jobs to the other.

*Fourth*, the people. We need to *gather the people*. They are everywhere! In Berkeley, for example, there are hundreds of students and retired people who would love to live in reasonably priced housing downtown. The location is ecologically appropriate according to our ecocity zoning map. All sorts of functions and services are there: jobs, food, arts, entertainment, the university campus, good transit to the whole San Francisco Bay Area. Downtown Berkeley is a perfect place for car-free housing. Developers should build it and go out and recruit these key people, who are out there and ready and willing to sign car-free leases. A local developer named Avi Nevo recently offered to build a new, car-free apartment house a half-block from the downtown rapid transit station and do just that: recruit tenants who would do very little environmental damage while bringing new customers —

themselves — to the downtown. His tenants would sign a lease agreement not to own a car and Nevo would make his building's operation legally contingent upon that agreement. He sought a use permit from the city to that effect.

To my amazement, the "progressives" on the Berkeley City Council voted the project down, saying they wanted the parking. The real reason, since they all claimed to be ardent environmentalists, is more likely the reflexive opposition several of them have toward developers who, from time to time, they feel obligated to cast as greedy exploiters of their constituents, thus maintaining clear party-line fights. The height of the building was cut down, too, making room for fewer people near transit and eliminating a rooftop garden that we in Ecocity Builders had been promoting and Nevo wanted to build. Claiming to support the citizens while voting against their housing and claiming to support transit, energy conservation, and CO<sub>2</sub> reduction in

Below:  
Ecological town in  
Northern  
California-like  
environment.



the atmosphere while voting against placing housing near transit gets more obviously inconsistent by the day. Hell, why not say it? It gets downright hypocritical.

Chambers of Commerce in most cities vigorously promote their towns, looking for conferences, tourists, companies to relocate, and so on. Cities with the ambition to lead society into a prosperous green future will need to adopt some of these boosterist techniques to seek out and round up talented people who are ready to relocate and carve out conscientious careers. People are needed for the technologies, businesses, and jobs on the list, and if there are incentives and if the people are invited, they will come.

I grew up in Santa Fe, New Mexico, and across the Rio Grande valley was Los Alamos, the "Atomic City" constructed to save the world from the Nazis. There the atomic bomb was designed and the first several constructed, including the two used against Japan. Whatever we may think of the use of the atomic bomb or its influence upon human events, the city itself had an *esprit de corps* based on its mission to defend the country and the "Free World." Today we could similarly initiate larger-scale community building projects with a mission — for example converting military bases to ecological towns. We could people these transforming communities with citizens who want to lend their talents and dedication to building a better world, to achieving peace between people

and the rest of the biosphere. I know that such people exist, because every year a few dozen find Ecocity Builders, coming to our organization from all over the world. They ask me if I can steer them toward exactly that kind of experience. They want to build their education and careers around ecological city building, and many of them want to live it. I am constantly frustrated by having to tell them there is no place where such work is being done in anything close to its wholeness. If an economy were being built around the four steps, there would be many such places.

#### The Four Steps Exemplified: Ideas for Ithaca

Joan Bokaer is not only building EcoVillage in Ithaca, New York, one and a half bicycling miles from downtown, but proposing to transform the city of Ithaca itself. She has an economic strategy that, first, assumes the reinforcing of centers and the withdrawal from sprawl pictured on the ecocity zoning map (Step 1). Next, her strategy defines the particular kinds of work needed for such a city (Step 2) and resolutely confronts the need for incentives to make the first two steps profitable to investors and the whole community (Step 3). Then she lays out an investment strategy based on what she calls the Green Fund. Watching it unfold, we are reminded of Jane Jacobs' engine of prosperity (the city) finding its optimal relationship with its hinterlands and thus becoming capable of

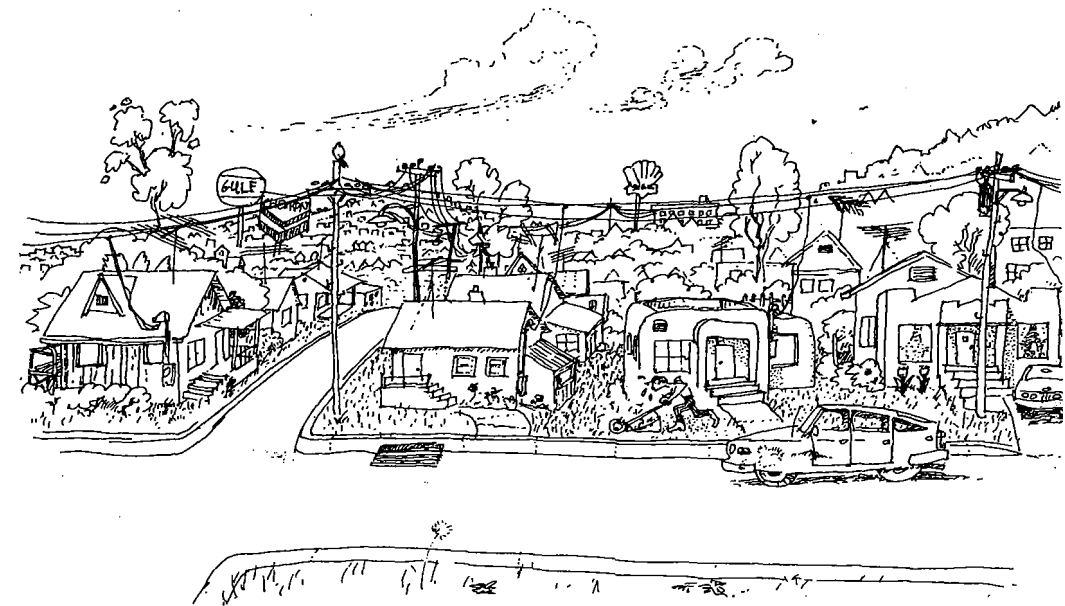
assuming its unique place in the larger world economy. Gathering the people (Step 4) is where Bokaer started — by inspiring and helping to organize the residents of 90 households and their predecessors at EcoVillage at Ithaca.

Bokaer points to the cycles of money circulating in an economy, being reinvested, and accruing to owners of businesses while workers are being replaced by new technology. A relatively small number of owners benefit disproportionately while a larger number of workers set out to find new work, retrain, attempt to start their own businesses, or go on unemployment or welfare. Why not encourage them to get ready to build the ecocity? Why not actually help them by investing in

businesses that contribute to that effort? She suggests that the city could be an active investor and thus join those who generally benefit the most in any economy, the owners:

I propose that each city create a Green Fund in which the city itself invests in numerous local entrepreneurs and holds a percentage of stocks in those investments, and its citizens become partial beneficiaries of the enterprises that succeed. The investments will stimulate economic growth by supporting local entrepreneurs, and it will foster a diversified economy by continuously investing in more of its citizens. The returns on the investments should be used to promote an ecological rebuilding program.<sup>4</sup>

*Cities with the ambition to lead society into a prosperous green future will need to adopt some of these boosterist techniques to seek out and round up talented people who are ready to relocate and carve out conscientious careers.*



"Density shift" — from sprawl to vitally three-dimensional. Old style suburb of a small town is disappearing while the town center is growing to become the whole town, in three drawings.

A city government embarking on such a strategy could count on itself for the zoning changes and ordinances beneficial both to those it invests in and to itself — that is, to the citizens of the city.

The city government could start small, with a modest-sized government like in Ithaca, setting aside, say, \$2 million the first year. It could invest in a hundred of its businesses, choosing to fund the ones that are on the list (Step 2). Some cities offer loans and technical assistance to, for example, recycling businesses. Says Bokaer, instead of loans these funds should be investment stakes and should be extended far beyond recycling to support a much wider range of businesses for ecocity rebuilding — with top priority assigned to businesses that will flourish with changes in the land use and infrastructure made in the direction of walkable centers and restored natural and agricultural areas:

The city, working in cooperation with the surrounding towns and the county (which should eventually become one government, city and bioregion together) need to draw up an Urban Growth Boundary (UGB) to define its edge .... The outside of the UGB should be zoned for a variety of forms of agriculture including agricultural ecovillages, and for the protection or restoration of natural areas. Future

development would take place within the UGB along transit lines, filling in much of the area presently used for cars. Since the surface space of about one-third to two-thirds of most US cities is devoted to the automobile, that leaves a lot of room to fill in. As the population grows along public transit lines, there will be more people paying taxes and shopping in the city — without requiring auto commutes and parking — thereby stimulating the local economy without creating traffic problems.<sup>5</sup>

Bokaer makes the point that house-moving and construction materials recycling businesses should be among those most favored with Green Fund investments. The Green Fund itself could be seeded by a mere half a percent to two percent allocation of the city's general fund every year, supplemented each year by profits from its investments. It would be a growing revolving fund the profits of which would pay for its administration and for helping more businesses until the city was thoroughly transformed. Increases in tax revenues due to the rebuilding could be spent on furthering the ecocity transformation process, "turning life in the centers and along the transit corridors into a true paradise,"<sup>6</sup> as the city invests in beautiful downtown pools, fruit trees in the streets,

ecological restoration and arts programs, and so on.

Consistent with the Green Fund, she also proposes a voluntary membership ecological rebuilding program administered by the city that directly addresses withdrawal from sprawl. The citizen freely chooses to join that program by "living within the urban growth boundary or, for those outside the boundary, participating in agriculture and giving up the privately owned automobile."<sup>7</sup> Pasadena once examined what might be called its "automobile balance of trade" and found it was losing \$6 million a year in costs to the city that were not recouped in parking fees, fines, state gasoline taxes transferred to the city, and other car-generated revenues. Since members of the ecological rebuilding program would be saving the city money by not owning cars, they would qualify for free transit passes, coupons for taxi rides, no-charge swims at the pools, subsidized medical coverage — whatever the city decided was appropriate for the citizen who saves them so much money — in addition to enjoying the benefits available to everybody, such as tree-lined bicycle paths away from automobile traffic along the newly opened watercourses.

This ecocity restructuring strategy could be implemented anywhere. Rust belt cities need to reinvigorate their inner neighborhoods, and many of them already have derelict open space that could be the begin-

ning of great new walkable centers and restored agriculture and nature corridors as well. Depressed lumber towns could use more diversified economies based on considerably reduced logging and increased other uses of land, from restoration and fishing to herb and mushroom cultivation, from tourism and small college campuses to high-tech research think-tank as well as the usual practical services to any community: food, clothing, hardware, repair, banking. Macho loggers recast as carpenters would feel more at home taking dangerous risks in building the new taller buildings of the ecological country town than retraining for desk jobs. I know the style and feel of those two kinds of gratifying physical and practical work, logging and carpentry, and I know that they are similar because I have worked at both.

Economically "successful" suburbs cranking out dollars but suffocating in asphalt could find their centers and begin the transition. As we have seen, it was an incentives package, complete with GI loans for new houses in the suburbs, tax dollars for freeways to get there, and student loans to learn how to build and run cities like that, that helped create sprawl. If we add the "ecocity insight" to the impulse to have both culture and nature, which helped fuel sprawl, and if we adopt an economic strategy like Joan Bokaer's, we might just get what we plan — just as we did when we planned sprawl and freeways.



## Ecocities and Rethinking Economics

*“Post industrial”? Never before has the planet been more industrialized, more ravenous in its consumption of energy, resources, and low-cost labor. Never have we taken more from the soil, waters, and atmosphere.*

Are we in a “post-industrial world,” or does the notion simply indicate a blind spot of the office to the world? The United States, northwestern Europe, Japan, and a few city-regions in the developing world are becoming office to the world. From inside these places it may appear that we are in a post-industrial world, in the information age. That world is an information world, as are all business administration worlds, but it is not the whole world. “Post industrial”? Never before has the planet been more industrialized, more ravenous in its consumption of energy, resources, and low-cost labor. Never have we taken more from the soil, waters, and atmosphere. In the office to the world we are isolated in our cities and suburbs from actual remnants of nature and vast tracts of poverty and resource exploitation around the Earth. We are cut off from firsthand experience by physical distance and that weird one-way “communications” filter called “television.” Frugality, as Soleri advocates, has to be designed into economic systems with the honesty and imagination to do, as Buckminster Fuller advised, more with less — the specialty of ecocities.

“Shrink for Prosperity” might be a slogan to help establish a better-founded set of economic premises. This notion has several dimensions. On the face of it, it looks

contradictory since we are so used to growth appearing to be the very basis of prosperity. Our economists tell us this over and over. But they fail to discuss the fact that the planet is a finite environment and neglect the reality of the exploited peoples in the world who frequently see no real gains from economic growth and often suffer terrible losses. Are the rich getting richer and the poor getting poorer, or not? History is the record written mainly by the victors. Winston Churchill said to his colleagues that “History will be kind to us, gentlemen, for I plan to write it,”<sup>8</sup> and after making a fair share of it, he did “write it” in his study of World War II. Economics is the record written mainly by those with the money, by those directing the exploitation. Both records, historic and economic, tend to bolster the interests of their authors and their patrons and the illusion that the world can be an office oblivious of the effects of the productivity it manages. The notion that we live in a post-industrial world is comforting because guilt for the over-exploitation of industrialism is assuaged. It’s as if everyone subscribing to it is saying, “That’s just the nature of it. That’s just what the reality is.” But it is a false construct based on denial and is having dire results. By any normal understanding of it, growth simply can’t be indefinitely sustainable on a finite planet. Long-term prosperity will require very

judicious “shrink.” We will need to “power-down,” as Richard Heinberg puts it,<sup>9</sup> one of the authors of the current flurry of books predicting major economic dislocations after oil production peaks and begins its inexorable, irreversible decline.

Then there are people who are doing well enough who would rather buy something hand-made even if a little more expensive, and shop at the corner store rather than Wal-Mart because they like the owners and their contribution to the community or because they want to see their money circulate in the community rather than go to Wal-Mart owners out of town. They want to free themselves of reading time-consuming email and junk mail and sorting coupons because they’d rather relax in the garden than work penny-pinching to save \$3.56. Some people adopting these essentially bioregional practices regard themselves to be part of the “simple living” movement.

In reality, there is nothing “simple” about living in a close-knit community or close to nature. Pursuing organic agriculture or permaculture? Very complex worlds are those. But if complex, ecological systems can be fairly easily comprehensible, they are not that hard to understand once a little systems thinking is applied. Take any old bird, for example — it’s incredibly complex down to the DNA deep in its microscopic cells, far more complex than

the structure of a city. And yet, we can easily grasp the basic function of its body parts and behavior: beak, wings, feet, eyes; feeding, nest building, mating, egg incubating, and so on. Similarly, understanding the ecocity makes it possible to greatly reduce the physical impacts of complex cultural structures, technologies, and activities. The ecocity facilitates many forms of complexity, providing interconnections and high levels of efficiency honoring their foundation in nature. The ecocity is in itself a miniaturization/complexification of the city in keeping with the “miniplexing” dynamics of evolution, but an urban transformation that makes things much more clearly understood and comprehensible as well as healthy.

The whole city, shrinking from the sprawled giants of today with their contradictory internal functions, becoming complex, integrally tuned three-dimensional structures, should produce complexities linked to one another so efficiently as to produce enormous prosperity relative to resources consumed. We may discover that the kind of prosperity that enriches life the most is a prosperity of opportunity for untold enjoyment of time, creativity, and nature.

Buy and boycott lists are crucial. Why so many people assume the giant corporations have all the power mystifies me. The attitude gives up our democratic powers without a

*We can disempower the giant corporations immediately, just by not buying their products.*

*If energy were expensive we would assuredly “discover” genuine efficiency on the larger scale. To help rebuild the city, then, we should consciously, as part of the strategy, increase energy prices by taxing fossil fuels while we still have the time, shifting resources toward renewable energy and the building of ecocities.*

fight or even a conscious whimper. We can disempower the giant corporations immediately just by not buying their products. We can use boycott and buy lists that reflect our values relatively easily with great effect, and there are organizations that provide such lists and ratings. So far there are no real lists available for supporting ecocity building with our dollars. But starting your own list is not that hard:

- No shopping at any place that has a gigantic parking lot or is served by freeway off-ramps.
- No shopping on-line for what you could buy in a walkable neighborhood.
- No more new cars, and as soon as possible no old ones either.
- No buying into gated, suburban communities with triple garages, and so on.
- Yes to buying so that your money circulates locally as much as possible.

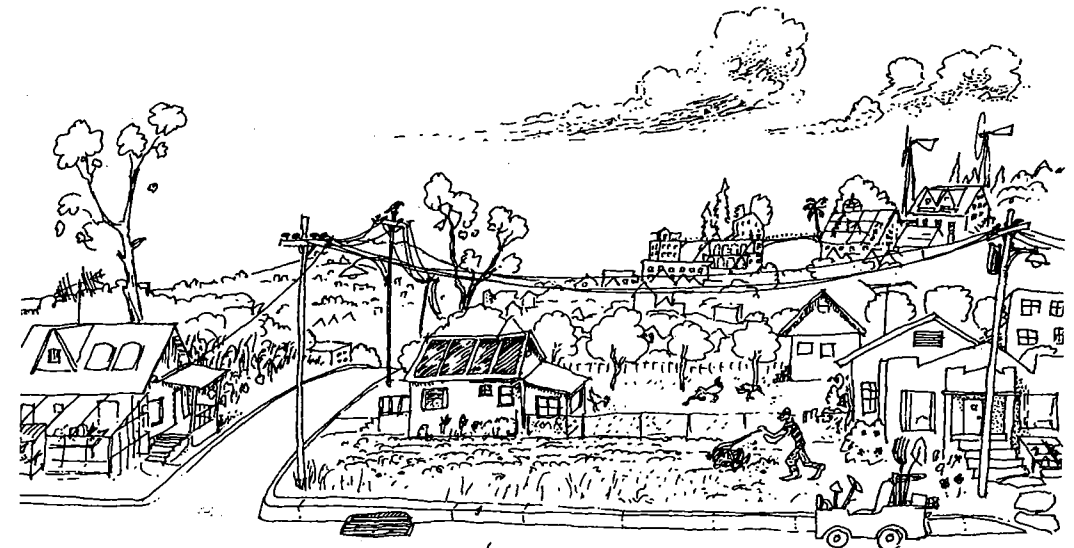
From many different angles, thinking through our four steps is a start for buying like a conscious and conscientious ecocity/bioregional citizen would.

Ethical investing is another approach. The investor might begin asking questions that lead to supporting companies that should be on the positive list. No investing in car/sprawl/freeway/oil companies; no

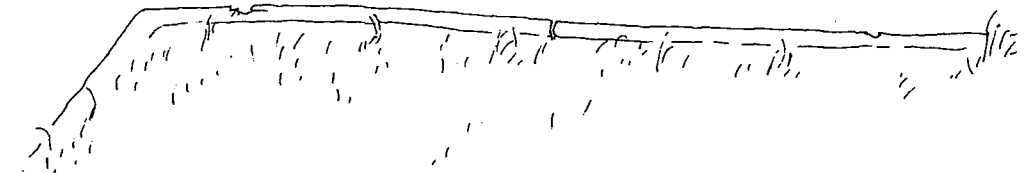
investing in companies with headquarters in car-dependent suburban office parks. Take this seriously! Divest now! “Buy and avoid” lists could be developed for municipal bonds. A city with a General Plan that was zoning-friendly to ecocity development and restoration would rate high and one unfriendly would rate low.

Cheap energy has been regarded as an economic boon. But it’s a problem. We are accustomed to thinking the cheaper the energy the better. But it doesn’t work like that. Oil has been and still is amazingly powerful relative to its cost. But from its origins at extraction sites in the Ogoni territory in Nigeria to the U’wa lands of Columbia and Venezuela, where the damage to natural lands and native peoples is catastrophic, to the sprawl built with its help, to the reservoir of its CO<sub>2</sub> wastes in the atmosphere to accidentally dispersed oil in the oceans, from the smog caused by American attack aircraft taking off in Saudi Arabia and Iraq to the actual devastation of the bombs ripping buildings and people into clouds of air pollution where deployed — everywhere cheap energy comes from and everywhere it goes, it causes damage.

Cheap energy means we don’t have to think through ecological design and building, we don’t have to think through organic agriculture or the virtues of many very successful traditional low-energy ways of life. We can ignore the virtues of “access by



Fifteen years or so later.



proximity” and simply ship in our “solutions” anywhere, paying as little as possible, thinking as little as possible. We’ve substituted savings in the cost of BTUs (British Thermal Units, a standard unit of energy) for clear thinking. Solar energy, thoughtful architectural design, carefully placed insulation, lifestyle adjustments to respect the seasonal and daily cycles, all look expensive compared with

simply blasting in some more heat or air conditioning when fuel is cheap. If energy were expensive we would assuredly “discover” genuine efficiency on the larger scale. To help rebuild the city, then, we should consciously, as part of the strategy, increase energy prices by taxing fossil fuels while we still have the time, shifting resources toward renewable energy and the building of ecocities.

We should also be conscious of the simple weight of shipped goods and the basic physics that says it takes energy to bridge long distances. Frequently used and relatively heavy materials should come from relatively nearby sources. Using lumber in the United States coming from South East Asia and bottles of wine from Chile, for example, other things being even close to even, does much more damage ultimately than buying these products from close to home. Shipping lighter weight items from great distances and things purchased very infrequently and for special culturally enriching purposes is generally less of a problem.

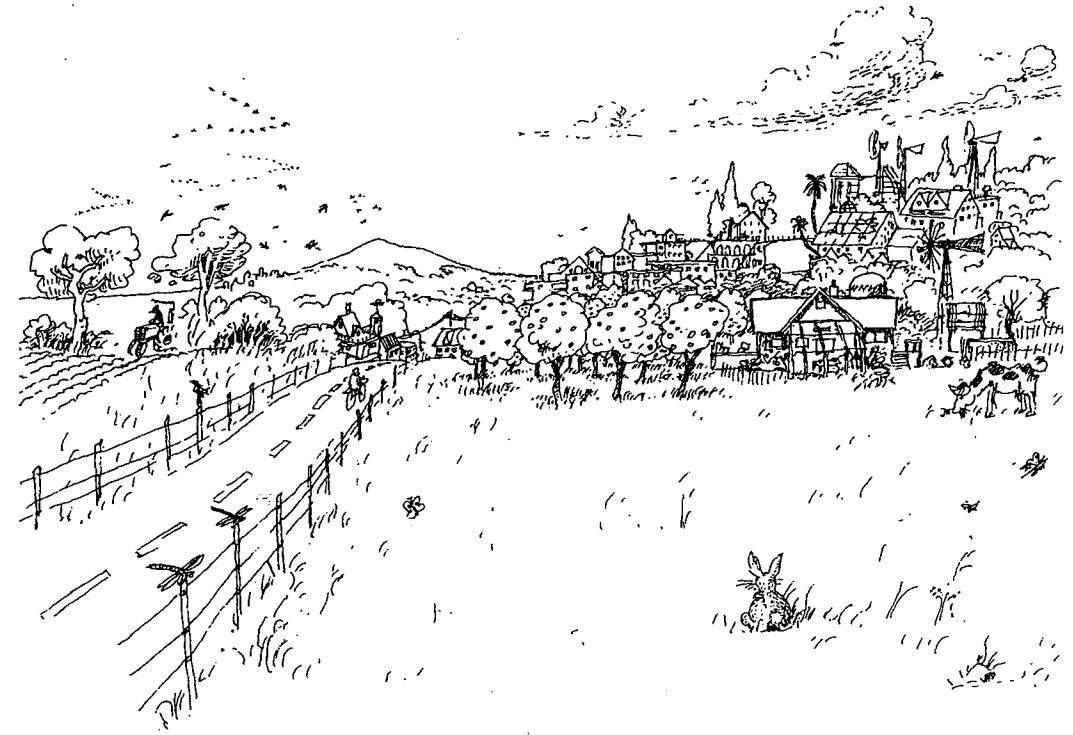
Another thing we need to be aware of is this: we have to get over the voting threshold to ecocity building. In 1979, a solar-based town with many of the ecocity features described in this book was proposed for an old military base north of San Francisco. There was a clear strategy behind it, but politics defined the threshold for decision, commitment, investment, designing, planning, and building. What promoters of Marin Solar Village envisioned for the decommissioned Hamilton Air Force Base would have been both a community of solar homes and a manufacturing and solar services town, a whole mixed-use community large enough to justify reestablishing an abandoned rail link that ran through the area. The Air Force sold the base to the county for a dollar but

the project lost in a countywide vote 49 to 51 percent. Jerry Brown was governor then and trying out all sorts of new ideas, and friends of ecocity work were in high places, but what should have been an enormously influential project at a crucial time just dissolved into oblivion. The crux of the whole thing was that northern Marin County thought of southern Marin County as snobby commuters to urban San Francisco who didn't appreciate the rural character of northern Marin, and southern Marin County people, who liked the Marin Solar Village idea, didn't reach out to the northerners because they normally just didn't have much to do with them. The whole thing was a pathetic morass of miscommunication on a different subject than the content of the proposal. Getting over these cultural blind spots to see the environmental and resources content of the proposal would have been crossing the threshold into new worlds.

Remember, only one out of ten people on this planet owns a car. That's something to be taken seriously in a world supposedly moving toward the goal of democracy and each person counting. It is in the great self-interest of the very large majority to adopt the ecocity economic strategy and get the appropriate land-use pattern established literally underneath the products and services of the green economy. On behalf of ecocities, many such thresholds of the sort that blocked Marin

Solar Village have to be crossed. The capitalist dream that we can all get rich contaminates reasonable voting for the public good, as millions of voters vote for privilege, hoping that one day they will be able to take advantage of it. On the lower rungs of the economic ladder, people who can't afford to

own cars vote for support for cars, never even thinking about the possibility of ecological land-use changes. We need to begin voting for what's best for the great majority, realizing that we are part of it. When that majority includes the other species and the people of the deep future — the true Great Majority —



About forty years later.

*These changes can be funded largely by "transfer of development rights," by which developers are encouraged to build larger ecological buildings in pedestrian/transit centers and required to help pay for purchase and removal of buildings — but only when there are willing sellers. This is a gradual approach, but if written into local ordinances, can cumulatively shift density and diversity to centers and create ecocities.*

and we vote on its behalf, we will have a political/economic solution of profoundly creative and healthy power.

Third parties in the United States take votes away from one major party or the other. As we know so well after the 2000 US national elections, the third-party role is too often the role of the spoiler. The two major parties are considered the only viable ones, and they effectively steal the ideas generated by third parties when they appear to be on their way to becoming popular. This is a great way of taking away from creative people the opportunity of applying and refining their ideas in the crucible of practice and preventing them from having a voice in decision making. Thus the big parties are the real spoilers. The third parties seldom elect anyone and tend to fade out as their best and brightest ideas are stolen and the best and brightest people turn cynical.

An ecocity political strategy with real potential would seem to be closer to that of the German Greens of the 1980s, rethought in the ecocity context. "We're neither right nor left, we're ahead," they said: The strategic alliance with this way of thinking is between the environmentalist and the developer. Traditionally seen as archenemies, if they could get together, they could solve an enormous range of problems. The objective is to build a new infrastructure for humans, not cars, for

health, not just for whatever we happen to be able to do on a whim with some technical ability backed by a few dollars. The present system promises profits to those who build and big profits to those who build big. What we need to do, therefore, is design a political/economic approach that rewards builders for building the right thing.

Environmentalists should understand what needs to be built and support the builders of those projects with public education and political backing, and the builders should support the environmentalists by helping pay for their work with the profits from the development that the environmentalists help make politically possible. Specifically, environmentalists and developers should work together to pass General Plans and zoning codes that make it possible for developers to make money building ecological features into their buildings and opening up landscapes for restoration of natural features like creeks and for community gardens, city parks, and the like. If the balance of wealth shifts too far toward the developer, those who see this as an inequity should pass higher taxes and use these moneys for public services — and to help restore nature and rebuild the city.

An ecocity environmentalist/developer alliance would have an interesting effect on the spoiler status of a green third party.

With voter support coming from both the traditional left/environmentalist and the right/business community, it would be far less clear which of the two major parties would have its ambitions spoiled by the candidate supported by those promoting ecocity policies. Third-party voters could vote their consciences without fear that doing so would shift the balance much between the two larger parties. Whether it would most hasten an ecological restructuring of society to build a third party largely around an ecological rebuilding program or to influence society enough that the major parties would champion ecocity poli-

cies doesn't really matter; we just need to get on with it. At the moment, though they are sometimes good at knowing what *not* to build, environmentalists are not much wiser than many developers when it comes to knowing what *to* build. The Green Party in Berkeley is promoting low-density development with all the enthusiasm of a loyal citizen of Atlanta or Phoenix. As it becomes ever more conspicuous just how destructive the car/sprawl/freeway/oil syndrome is and how sensible the ecocity alternative, perhaps everyone will be more willing to acknowledge the power and benefit of environmentalists and developers working together.