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THE SUSTAINABLE CITIES MOVEMENT
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August 1991

An IRSS Working Paper

Summary

Sustainable city projects--municipal environmental efforts justified as responses to global environmental problems--have sprung up in cities throughout the world. Although they often use a definition of sustainability whereby people satisfy their needs without further destroying the environment, few projects address the far-reaching consequences this idea would have if it were seriously pursued. Nonetheless, existing sustainable city projects may have far-reaching effects. They have helped make the environment a legitimate concern for cities, and they have made the idea that people should change their behavior, at least a little, to help save the planet socially acceptable in many communities. They have also, in some cities, increased citizen participation in government decision-making. These changes may be laying the groundwork for more comprehensive efforts.

ISBN #0-945369-04-2

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Acknowledgements

Amy Randall did much of the initial research for this paper. While many people provided valuable information and insights, the author accepts responsibility for the content of the paper. Among those who shared their ideas and experiences are Rita Norton, Richard Levine, Sue Anderson, Cal Broomhead, Ed Vine, Lynne Johnstone, Andy Euston, Jeb Brugmann, and Jack Werner. The author also thanks Gordon Thompson for his support and assistance. Partial support for preparation of the paper was provided by the Institute's share of a grant to Clark University from the John D. and Catherine T. MacArthur Foundation.

1. Introduction

“Can we move nations and people in the direction of sustainability? Such a move would be a modification of society comparable in scale to only two other changes: the agricultural revolution of the late Neolithic and the Industrial Revolution of the past two centuries. Those revolutions were gradual, spontaneous and largely unconscious. This one will have to be a fully conscious operation, guided by the best foresight that science can provide--foresight pushed to its limit. If we actually do it, the undertaking will be absolutely unique in humanity's stay on the earth.”

William D. Ruckelshaus, *Scientific American*, September 1989

A sustainable cities movement, with programs in dozens of cities around the world, international conferences, and an international organization, has sprung up in the past few years. It has spread although--or perhaps because--sustainability has not been clearly defined. Projects that include the term in their descriptions have, for the most part, been attempts to develop more environmentally sound practices in one or more areas of city life. Many of the project descriptions refer to global environmental issues, and a few include some discussion of the need for major changes in the way people live.

Through these projects, experience in developing more environmentally sound cities has begun to accumulate. This experience may help create a clearer sense of what sustainable cities might be like and how they could come about. This paper examines some of the trends in the sustainable cities movement, looks at the question of defining sustainability and sustainable city projects, and describes some representative efforts. It includes brief descriptions of a few projects but does not provide a comprehensive list of sustainable city projects, of which there are now many.

2. What is sustainability?

In Richmond, Indiana, sustainability involves investigating biomass sewage treatment and energy conservation programs and expanding the farmers' market; San Francisco is recycling asphalt; San Jose is developing greenbelt strategies to reduce suburban sprawl; and Portland, Oregon, is weatherizing multifamily low income housing, all in the name of sustainability. In each of these cities, environmental sustainability has become an official goal.

The World Commission on Environment and Development calls development sustainable if it "meets the needs of the present without compromising the ability of future generations to meet their own needs."¹ This definition is frequently cited and has been adapted by some cities to describe their own efforts. Despite its radical implications, the concept of sustainability has gained currency, especially as awareness of the dangers of global warming has grown. It marks a shift from approaches that have emphasized amelioration or cleanup to a recognition that, in

¹ World Commission of Environment and Development, *Our Common Future*, (Oxford and New York: Oxford University Press, 1987), p. 8.

the face of a possible synergistic collapse of the ecosystem, the environmental impact of all human activity may need to be examined. For example, automobile exhaust is now recognized as a major contributor to the greenhouse effect. A traditional approach might be to work for emission controls that would eliminate half the exhaust. A sustainable approach might call for eventually eliminating automobiles, or at least those with internal combustion engines.

The above definition implies that sustainability includes the effects of a city's activities both inside and outside the city, which raises a multitude of questions. Do the materials and energy a city uses come from renewable resources? Did their production or transport to or from the city create air, land, or water pollution? Do they create pollution during consumption, recycling or disposal? Insulating houses helps cut down on local energy consumption, but, if the insulating material contains CFCs (chlorofluorocarbons), it may not be a step toward sustainability.

3. Why focus on cities?

Cities are growing. By the end of the century, over half the world's people are expected to live in cities.²

Cities have qualities that make them suitable centers for environmental efforts. City governments and organizations can be relatively flexible compared to state or national governments, taking actions that are appropriate to local politics, culture, and geography. Further, while state and national initiatives are essential for forging many of the strategies, technologies, and regulations needed for sustainability, cities often provide or control some of the most important aspects of sustainability, including land use, transportation systems, waste disposal, building codes, schools, and public housing. Because these are among the public services most connected with our daily lives, it is often easier to organize citizen action within a city than at the state or national level.

It may be easier, too, for people to imagine and be concerned about what their community will be like in fifty years than to imagine the long-term future of the planet. Change within a city may seem more achievable than change on a national or global basis. It is easier to imagine success. It is usually easier to build a sense of community and commitment. People may find it easier to focus on doing something about the quality of their city's water, for example, than to work on a national water problem.

Cities have some ecological advantages over suburbs or small towns. Environmentally sound transport of people and goods can be developed more easily, and people can meet many of their needs without traveling very far. Multifamily housing uses land and other resources more efficiently. At the same time, cities, like suburbs and small towns, have been built without much concern for sustainability, and restructuring existing cities, especially those that were built largely after the development of the automobile, may be very difficult. Some experts have suggested that most cities cannot change sufficiently to become truly sustainable and that

² Janice E. Perlman, *The Mega-Cities Project: A Research/Action Strategy to Transform Urban Policy from the Bottom Up* (New York: New York University Urban Research Center, February 1988), p. 1.

starting from scratch--building new "ecocities"--makes more sense, at least when planning accommodation for the growing world population. Nonetheless, our existing cities are likely to continue to grow.

4. Sustainable City Projects

Publicity about global warming has encouraged a resurgence of environmental efforts during the past five years, including many sustainable city projects. The city council of Vancouver, British Columbia, for example, appointed a task force on atmospheric change, which evaluated the local and global threats posed by global warming, acid precipitation, smog, and depletion of the ozone layer. The task force presented thirty-five recommendations for city action to the city council, which approved almost all of them. They range from taking measures to encourage people to work at home, ride bicycles, or carpool to requiring that reducing atmospheric change be part of local land use planning.³

One of the most publicized US projects is a strategic planning venture involving San Francisco, San Jose, and Portland, Oregon. The short-term goal is modest: cuts in energy use of ten percent from the expected use by the year 2000, which would leave energy consumption in 2000 about what it is today.⁴ By putting the project in the context of sustainability, however, these cities are explicitly acknowledging that a great deal more needs to be done.

San Francisco's Bureau of Energy Conservation developed a list of criteria for sustainability, then evaluated possible projects in light of the list. The criteria include creation of a fully participatory society, the use of only renewable energy or recycled materials, use and reuse of all waste, transit alternatives to reduce automobile use, restoration and protection of natural habitats, creation of sufficient appropriate housing, and community design that would "minimize resource use and maximize efficiency, self-reliance and social interaction within a neighborhood context." The list also includes "sustainable production of goods and services." All production, "including public services, must be simultaneously beneficial to economic development and resource efficiency."⁵

The bureau then evaluated city policies and programs to see how they contributed to the objectives and how they helped support other efforts. Their initial project, chosen because the bureau was familiar with the issues involved, deals with commercial building regulations.

5. Amelioration, Partial Efforts, and True Sustainability

Many current efforts in the name of sustainability might well have been made as easily without that context. Most of them make short-term economic sense or address immediate local problems such as increased landfill costs or threats to water supplies. None of the projects undertaken by existing cities addresses the need for basic restructuring that sustainability will probably require. In fact, some projects seem counterproductive to long-term changes.

³ City of Vancouver Task Force on Atmospheric Change, *Clouds of Change* (Vancouver: June 1990).

⁴ Expected future use is based on projected population increase.

⁵ Urban Consortium Energy Task Force Sustainable City Project, Interim Report (1990).

Widening a major highway in Boston, for example, has been justified in part as a step toward curbing global warming because faster-moving traffic creates less air pollution.⁶ The City of Toronto's Special Advisory Committee on the Environment argues, however, that long-term gains are better achieved by emphasizing "demand-management, *not* supply-side measures such as widening of arteries that serve as an incentive to increased road use."⁷

The limitations of many amelioration efforts are spelled out in the Vancouver task force report: "Continuation of our past approach to air quality management--addressing pollutants individually, considering only local impacts of pollution sources, and relying on conventional air pollution control technology--will not allow us to achieve most of the defined air quality goals. It is also likely to exacerbate regional and global air quality problems."⁸ For instance, efforts to encourage the use of public transportation in a city's center by constructing parking garages at the end of subway lines may create cleaner air downtown, but if they encourage more driving in the suburbs they could increase global warming.

The Vancouver report also points out that we may well not have time for Band-Aid approaches. If we are to save the ecosystem, it may be necessary for us to take immediate drastic action. Partial measures that pretend to be prescriptions for sustainability, even if they decrease pollution, may be counterproductive if they lull us into believing that we are actually taking important steps to preserve the planet.⁹

Some proponents of current sustainability projects, while acknowledging the drawbacks of making partial efforts, point to the difficulty of persuading people to take drastic action and argue that advocating relatively small steps, a few at a time, is the best way to proceed. By starting with the areas in which there is the most community consensus, they say, they can begin to build community involvement. A more radical approach might polarize the community or marginalize the advocates of sustainability.

Placing modest projects under the rubric of sustainability does risk rendering the term meaningless. Nonetheless, doing so may have some important advantages. It emphasizes that a particular project is only one element in a multidimensional transformation, and it makes it likelier that the project will be appropriate, given the larger context. It could help inform decisions about spending large sums of money on proposed improvements to urban structures or systems that, in a truly sustainable city, would have to be eliminated. Decisions related to highway construction, for example, would probably include recognition that automobile use should be drastically reduced as soon as possible.

A sustainability approach has more positive, proactive implications than an ameliorative approach. Even if this is just a difference in language, it could help people feel more hopeful

⁶ Frederick Salvucci, Secretary of Transportation, Commonwealth of Massachusetts, meeting with community representatives, October 12 1990.

⁷ City of Toronto Special Advisory Committee on the Environment, "The Changing Atmosphere: A Call to Action," (City of Toronto, 30 October 1989), p. 8.

⁸ City of Vancouver Task Force on Atmospheric Change, p. 18.

⁹ Richard S. Levine and Ernest J. Yanarella, "Does Sustainable Development Lead to Sustainability?" (Lexington, Kentucky: Center for Sustainable Cities, University of Kentucky College of Architecture, n.d.).

and excite and spark a more long-term commitment than a movement seen solely as staving off disaster.¹⁰

One difficulty with developing more comprehensive plans is that much of the technical information needed to plan true sustainability is not available to cities because not all the necessary research and development has been done. Also, the complexity of the relationships among physical, social, psychological, economic, and political factors virtually guarantees some unexpected results from any sustainability project. Designs for new sustainable cities typically include careful consideration of a large number of factors, but only after the cities have been built and occupied can their environmental effects and livability be thoroughly evaluated. Adequate information about transforming existing cities will probably exist only after many projects have been undertaken and their results analyzed. Many well-documented projects are needed, and identifying a project as a step toward sustainability could encourage careful measurement of results and dissemination of findings.

The Sustainable Urban/Rural Enterprise project in Richmond, Indiana, for example, includes the development and implementation of a county-wide Geographic Information System (G.I.S.). G.I.S. is a computerized database with maps of topography, soils, geology, population, hydrology, transportation routes, zoning regulation, land use, and many other elements of urban and rural life. The system will be used to develop community designs appropriate for county-wide transition to sustainability. This kind of careful data collection and analysis, which will be used both for planning and evaluating projects, is unlikely to happen outside the context of sustainability.¹¹

Another advantage of the sustainability concept is that it offers a common goal around which cities undertaking a variety of programs can organize and find support. The perception of being part of a widespread movement can help make innovations socially acceptable. This is particularly important when major changes in attitudes, values, and behavior are involved. A focus on sustainability as a goal also encourages efforts that do not directly benefit a city, at least in the short run. Two examples of this kind of effort are the many city ordinances to ban chlorofluorocarbons and ordinances to ban nonrecyclable packaging. Both measures, it could be argued, impose some economic hardship on a city, particularly if other cities have not done the same thing, and will have little environmental impact unless the city's example is followed by other communities. Both reflect faith that there is, or will be, a widespread movement to push cities to take initiatives on environmental issues.

6. Creating a Movement

In an effort to generate mutual support, share ideas, and gain visibility, the first international ecological city conference was held in Berkeley, California, in March 1990. Most of the

¹⁰ For a description of how people in the nuclear disarmament movement struggled to develop a positive vision, see Pam Solo, *From Protest to Policy: Beyond the Freeze to Common Security* (Cambridge, MA: Ballinger, 1988).

¹¹ Lynn Johnstone and Robert J. Koester, "A.C.T./S.U.R.E." (Paper presented before the Sustainable Cities Symposium: Preserving and Restoring Urban Biodiversity, The Chicago Academy of Sciences, 4-6 October, 1990).

conference's participants were citizen activists rather than government officials. Most were from industrialized nations. The conference considered projects as varied as Arcosanti, a sustainable city being built in the desert by volunteers; conversion of old rail corridors on Cape Cod into bike paths; and the efforts of Jean Gardner, who, after years of photographing and publicizing New York City's natural treasures, organized environmental activists to set up a dialogue with city officials.¹² Regardless of how far people have been able to progress in reaching their ecological goals--and clearly the task is much more formidable in some cities than in others--a conference of this kind provides recognition that they are part of a common effort, though it was almost entirely confined to people from industrialized nations.

A geographically more inclusive effort, the World Congress of Local Governments for a Sustainable Future, took place at the United Nations in September 1990. The conference attracted four hundred representatives of two hundred cities in forty-one countries. These local government officials decided to create an organization, the International Council for Local Environmental Initiatives (ICLEI), to help communities of all sizes develop local environmental programs. The executive committee of the new organization includes officials from both the northern and southern hemispheres, reflecting a concern not only for global environmental issues, but also for local environmental issues many developing countries face, including the lack of basic sanitation services and drinkable water.¹³

Another international organization, the Mega-Cities Project, serves the twenty-three cities that will have over ten million people by the year 2000, most of them in Third World nations. The project spreads information about ideas and programs that are not necessarily labeled "sustainable" and are as diverse as the cities themselves. In Bangkok, for example, a "magic eyes" campaign, directed toward children, has reportedly reduced litter on the city's streets by ninety percent. Other efforts in Bangkok to give people more stake in the city include sharing city land slated for development with squatters, who help each other build low-cost housing, and a government decision to not enforce zoning and commercial regulations that would drive out small neighborhood enterprises.¹⁴ In Buenos Aires, private cars are banned from much of the downtown area on weekdays to help combat congestion and air pollution.¹⁵

One of the most comprehensive urban efforts to combat air pollution has been developed in the Los Angeles basin, which has 12 million people, 5.6 million cars, and the worst air pollution in the United States. The plan, designed to bring the area into compliance with federal air quality standards by 2010, calls for converting cars to electric power or 'clean' fuels such as methane, installing control devices on boilers and trash-burning plants, placing controls on solvents such as paint, and eliminating free parking. Los Angeles also plans to plant five million trees in the

¹² Christopher Canfield, editor, *Ecocity Conference 1990: Report of the First International Ecocity Conference, March 29-April 1, 1990* (Berkeley, California and Dorena Lake, Oregon: Urban Ecology and Cerro Gordo Town Forum, 1990).

¹³ World Congress of Local Governments for a Sustainable Future, Congress Report (New York: The United Nations, 4-8 September 1990).

¹⁴ *Mega-Cities Project City Profiles* (New York: NYU Urban Research Center, 25 October 1989).

¹⁵ *Ibid.*

decade ahead.¹⁶ Though primarily an attempt to ameliorate a major health threat rather than move toward sustainability, this program, like the one in Buenos Aires, by demanding changes in citizens' daily behavior, may make future sustainability efforts more socially and politically acceptable.

7. Dissemination and Prototypes

One of the primary purposes of the Mega-Cities Project is prompt dissemination of information about successful programs in a way that will encourage replication. The project plans to set up a center for the exchange of information and will develop education and training materials, offer mass media presentations, produce papers and hold policy briefings. In addition, every city that takes part in the project is obligated to implement at least one innovation that another city has developed.¹⁷

Other projects also include provisions for transferring information. The San Francisco-San Jose-Portland Sustainable Cities Project includes some funds for technology transfer and requires each of the cities involved to work with another city that is interested in adopting energy use reduction measures. The ICLEI URBAN CO2 project also includes plans for a partner city program. Each participating city will be required to recruit and assist another city.

Efforts to collect and make available information about sustainable city projects include Renew America's Environmental Success Index, which describes environmental efforts in the United States. The Organisation for Economic Co-Operation and Development has undertaken initiatives to establish an Urban Observatory to collect information about urban environmental projects in its member nations and put it into a usable form.

8. Cities of the South

It is in the Third World--mostly, the Southern Hemisphere--that cities are growing most rapidly. Many of the environmental issues facing Third World cities are quite different from those facing industrialized cities. People in some Indian cities are stripping nearby forests because they need wood for cooking fires. People in Minneapolis are buying redwood picnic tables, and California forests are being destroyed.

How cities deal with such issues raises complex issues of fairness. If a pattern of consumption approximating the First World pattern were to spread to many other countries, the planet's ecosystem might quickly collapse. This puts pressure on First World cities to implement different models and on Third World cities to develop sustainable alternatives that meet people's needs. It makes a global perspective and the exchange of ideas vital.

Janice Perlman of the Mega-Cities Project has pointed out that First and Third World cities have much in common. First World cities have Third World sections and Third World cities

¹⁶ Michelle Yesney, "The Sustainable City: A Revolution in Urban Evolution," *Western City* (publication of the League of California Cities), March 1990, p. 6.

¹⁷ *The Mega-Cities Project*, p. 20.

have First World populations. While many technologies from the First World appear to be urgently needed in Third World cities, the opposite may be true as well. Grassroots citizen initiatives have arisen in many Third World cities, for example, and taken hold in ways that seem hard to imagine in First World cities.

A twenty-first century sustainable city is likely to look quite different from any existing city. It may well combine attitudes, social structures, and technologies from the most and least industrialized of the world's cities.

9. Sustainability, Social Structure, and Values

Present sustainable city efforts are first steps down what may be a long road to a very different world, a world in which the ideal relationship between individuals and society may be redefined. Two complex sets of issues--the rights of the individual versus the rights of society and the related issues of enfranchisement and how power is distributed and used within a society--will need to be examined as part of the sustainability effort.

Should necessary changes be legally mandated? Should they be part of a deliberate effort to change values? Should tax incentives and penalties be used? Recycling, for example, might be voluntary, with a belief that social pressure will induce people to recycle. It might be mandated, with fines for noncompliance or a ban on recyclable goods in public landfills. People might be charged the cost of establishing and maintaining landfills with a per-rubbish-barrel tax. Each choice implies different values and beliefs.

There does seem to be widespread agreement that an increased sense of community needs to be part of sustainability efforts. Most sustainability projects have been developed from citizen initiatives or with substantial citizen participation. A community probably cannot achieve compliance with measures to conserve resources if its citizens feel alienated, no matter what enforcement measures are used.¹⁸ San Francisco's first criterion for sustainability, creation of a fully participatory society, takes account of this, as do Bangkok's efforts to help some of its poorest residents feel a sense of participation in the city.

At present, in many cities, elected officials feel pressure to offer short-term benefits rather than short-term sacrifices for long-term benefits, a practice that works against sustainability efforts. Widespread citizen participation could help promote more long-term thinking and the inclusion of factors other than short-term financial considerations in cities' decision-making processes. This could have profound effects on a community's economic and social organization.

Sustainability efforts will have to be multifaceted. The concept of interconnectedness underlies ecological thinking and seems to be reinforced with each discovery of environmental damage or threat. If this concept becomes generally accepted, it will have profound social implications.

¹⁸ For discussion of the problems of a lack of a sense of community in the United States, see Robert Bellah, et al., *Habits of the Heart: Individualism and Commitment in American Life*, (Berkeley, California: University of California Press, 1985), pp. 196-274, and Robert B. Reich, "Secession of the Successful," *The New York Times Magazine*, January 20, 1991.

Many cities, faced with apparently insuperable crises of inadequate housing and education, unemployment, and crime may feel that there is no energy or money for environmental sustainability. In reality, failure to deal with environmental issues can, in the long run, exacerbate the other problems. Delays in eliminating lead from automobile exhaust, for example, created learning problems for many children. The recognition of interconnection is perhaps the major distinguishing feature of thinking in terms of sustainability.

Environmental and economic concerns have often been seen as clashing. Issues such as whether to build a shopping mall on a wetland or to freeze the number of parking places in a business district are the kinds of highly visible battles that have pitted environmentalists against business people. To avoid this kind of conflict, proponents of many sustainability projects have emphasized the long-term economic gains the projects will bring the community.¹⁹ Nevertheless, sustainability will inevitably require some redistribution of profits and some changes in values and habits. Economic systems have tended to ignore the natural world on which, ultimately, they are based. Sustainability will probably require an economic system that ties short- and long-term environmental costs of making, using, and disposing of products into purchase prices.

10. Some Specific Projects

Around the world, there are hundreds of relevant urban projects, both citizen initiatives and government efforts. Below are brief descriptions of a few projects and organizations. The descriptions are based on information supplied by people involved in the projects. No attempt has been made to evaluate a project's success in meeting its stated goals or whether the goals make sense given the project's resources and setting. Contact information for many of the organizations mentioned here is provided in the annex.

CITIZEN INITIATIVES

Urban Ecology

This Berkeley, California, organization has undertaken a number of local projects, including creating a "slow" street connecting the city center and a neighborhood shopping area, restoring creeks, spearheading successful opposition to the widening of an interstate highway, and developing plans for the downtown area and for alternative transportation.²⁰

Philadelphia Green

The largest urban greening program in the United States, Philadelphia Green was founded by the Pennsylvania Horticultural Society in 1974. It has established over a thousand community gardens on vacant lots throughout the city.²¹

¹⁹ Siegfried Brenke, et al., "Building Sustainable Communities," *Nation's Cities Weekly*, April 16, 1990, pp. 9-10.

²⁰ "Bay Area Ecological Rebuilding Projects," *Urban Ecologist: The Newsletter of Urban Ecology*, Summer 1990 (PO Box 10144, Berkeley, California 94706).

²¹ Canfield, p. 73.

Development Alternatives of New Delhi

The projects the organization develops and promotes are designed to foster environmentally sound grassroots enterprises. Projects include recycling industrial waste, making concrete from fiber and bricks from mud, manufacturing solar water distillers and smokeless cookers, and developing integrated energy systems for improved energy efficiency.²²

USCOVI: Pueblo Unido

Squatters in the Il Molino section of Mexico City have organized to construct housing that incorporates ecological principles. The housing uses modules made on the site with local materials. Garbage, household waste water, and sewage are treated, creating fertilizer that can be sold and water clean enough for community gardens.²³

R2 B2 Recycling Program

Begun in 1982 in the South Bronx, one of New York City's poorest neighborhoods, as a money-making operation for a community organization, R2 B2 is a recycling company that operates an intermediate multimaterial processing facility and a buy-back center that pays people for the trash they bring in. It is fulfilling a number of purposes: recycling trash, providing jobs in a poor community and income opportunities for community groups, and making the city cleaner. It has recycled over thirty-three thousand tons of materials, brought over \$2,000,000 into the South Bronx, created twenty-three jobs, and paid out over \$300,000 for trash. Similar efforts, inspired by R2 B2, are underway in Manhattan and in Dublin.²⁴

Florida House Foundation

Florida House Foundation, working with local environmentalists in Sarasota, Florida, and the county extension service, has built two model homes designed to demonstrate a more sustainable way of living.²⁵ They are also pursuing the idea of traditional neighborhood development--compact multiuse neighborhoods, using concepts developed by architect Andres Duany. Many local environmentalists see traditional neighborhood development as a way to control urban sprawl and create a more livable city. Many members of the local business community, alarmed by a twenty-five percent vote for a ballot initiative calling for a two-year moratorium on development, see traditional neighborhood development as a way to help preserve their economic interests. Florida House Foundation plans to work with the extension service to rewrite city ordinances so they are compatible with traditional neighborhood development.

Model Tribal Slum

Bombay's sustainability initiatives emphasize self-help programs for the squatter, slum and pavement dwellers, who are about fifty-seven percent of the city's population.²⁶ One

²² *Mega-Cities Project City Profiles.*

²³ *Ibid.*

²⁴ *Ibid.*

²⁵ Telephone conversation with Henry Osborn, Florida House Foundation, 11 January 1991.

²⁶ *Mega-Cities Project City Profiles.*

program, the model tribal slum, was organized by a group of former migrants. In many publicly-owned suburbs, new settlers tend to build huts in tribal groupings in a "random and scattered fashion." The program helps the new settlers get permanent housing sites and organize their settlements in blocks, with numbered houses and main pathways for small shops, a community center they build themselves, public toilets, a sewage system, schools and a health center.

Cubatão, Brazil

Once known as the Valley of Death, Cubatão now calls itself the City of Ecology.²⁷ Until the mid-1980s, Cubatão was often described as one of the most polluted places in the world. The surrounding mountains kept air pollution from steel, fertilizer and petrochemical plants from dispersing, and clouds of ammonia and fluorides killed forests and poisoned city residents. Following some dramatic environmental disasters, a local environmental group called Valley of Life led a campaign to force industry to comply with antipollution laws. Smog alerts fell from sixteen in 1984 to one in 1990, and infant mortality rates were cut in half. Environmental education is now required in city schools, and the city has planted 130,000 trees, built bike paths and a sewer system, and created four "ecological parks."

Chattanooga Venture

Chattanooga, in 1984, was in a recession. Its industries were leaving, unemployment was high, and economic prospects seemed bleak. A group of people decided a new approach was needed, one based on energetic citizen participation.²⁸ Chattanooga Venture hired a consultant, who taught a group participation process to fifty people, who then trained others. The process worked well, a network of neighborhood associations was set up, and many of the original goals for the city were realized. Chattanooga Venture turned to local environmental problems, including air quality. The city's air was among the most polluted in the United States, largely because of particulate matter from local industries. Using local and EPA regulations, the city forced the industries to lower their pollution production dramatically. In April 1991 Chattanooga Venture held a conference on sustainability, with an emphasis on solutions to environmental problems. The project has shared its process with Asheville, NC, and hopes to share it with organizations in other cities as well.

CITY PROJECTS

The Sustainable Cities Project

This collaborative project, undertaken by the cities of San Jose, San Francisco, and Portland, Oregon, is funded by the US Department of Energy through the Urban Consortium. With the help of Lawrence Berkeley Laboratory and the Washington State Energy Office, the cities have worked on defining sustainability and developing programs that will produce a more sustainable city.

The project focuses on lowering projected energy demand in all three cities by at least ten percent by the year 2000. Using arguments that reduced energy consumption not only

²⁷ *New York Times*, 14 June 1991, p. 2.

²⁸ Telephone conversation with Eleanor Cooper, Chattanooga Venture, 19 June 1991.

decreases pollution but is good for the local economy, the project designers hope to demonstrate that a more sustainable society is not only compatible with economic development but, in the long run, is crucial to such development. They argue, for example, that money saved by conserving energy goes into the local economy.

Each of the three cities has a coordinator who works with a national advisory team and the Energy Task Force of the Urban Consortium to evaluate proposed projects, based on how the projects fit into the overall objectives. Although the cities have followed a similar planning process, each has come up with a different plan.

As part of the project, the cities will hold a symposium for other cities interested in learning about the project. In addition, Department of Energy funds will be available for some technical assistance for a few cities interested in initiating similar projects.

San Jose

Under the project, the San Jose Office of Environmental Management has compiled a list of program options, developed an energy analysis service for new commercial construction and a residential energy rating system, and created an integrated environmental audit program for large industrial sites. Other efforts include a public school education program and a program to educate retailers on energy conservation measures, lighting, and efficiency of appliances.²⁹

The concept of sustainability is growing increasingly visible in San Jose. The city council has formally adopted a sustainable cities strategy, and the mayor plans to form a sustainable city committee, which may embrace more comprehensive strategies than the current energy plan. The energy office is considering setting up an institute on sustainable development.

San Francisco

San Francisco had energy conservation programs in place, coordinated by the Bureau of Energy Conservation, but saw the need to create an integrated long-term plan to achieve sustainability. After developing a framework and evaluating possible programs in light of it, the city found three areas were central to many of the programs looked at: commercial building codes, resource planning on large developments, and transportation management in commercial districts. Besides focusing on these areas, the city is developing an environmental education center, investigating streetsweepers that run on propane, designing a waste water treatment program to deal with street runoff, implementing an asphalt recycling plan, and promoting solar energy use through planning and building code amendments.³⁰

Portland, Oregon

Portland had already established curbside recycling for households and businesses, a regional composting facility, and a clean river program before the Sustainable Cities project began. It also had an energy conservation policy, developed in 1979. To develop a new energy plan, city

²⁹ Urban Consortium Energy Task Force, "Year Ten Interim Report" (San Jose: Office of Environmental Management, June 1990).

³⁰ Urban Consortium Energy Task Force Sustainable City Project, "Year 11 Work Plan" (San Jose: Office of Environmental Management, n.d.).

officials met with over fifty organizations, including community groups, and held public hearings. Several hundred people, including engineers, business people, environmentalists, housing officials, and human service advocates, were involved in creating the final plan, which has more than eighty components and touches on many aspects of city life.³¹

In the first two years of the energy plan, the city will facilitate weatherization of eight thousand low-income multifamily housing units, promote construction of a regional light rail system, set up recycling programs for multifamily and commercial buildings, support regulatory and building code changes, establish a set-aside fund for financing municipal energy-saving projects, and increase municipal energy efficiency by ten percent.

The Rebound Program of the Washington State Energy Office

Two communities--Ellensburg (11,700 people) and Morton (1,250 people)--have become test sites for Project Rebound, organized by the Washington State Energy Office. The project's goals are to "improve energy efficiency within a community to enhance its own economy, study the way energy efficiency improvements affect communities; and document the program so it can serve as a model for other cities."³² Both communities have established advisory teams, initiated training for utility and school staff, and conducted comprehensive energy audits of commercial and public buildings.

Ellensburg, a somewhat economically depressed city with industry, a university, and surrounding farmland, was chosen in part because about eighty-five percent of its residences were already insulated and the city wanted to focus on industrial and commercial sites to help them economically as well as environmentally. Priorities are set by the local community advisory team, which includes representatives from local businesses, the schools, the professional community, and the utilities. The city-run utility has provided over \$322,000 in no-interest loans and cash grants to help businesses lower their energy costs. The results are being monitored and, it is hoped, will provide valuable data for future efforts elsewhere.

Seattle, Washington

In 1988, faced with the closing of its landfill and public opposition to building an incinerator, the Seattle government decided to reduce waste sixty percent by 1998. By 1989 the city had already reduced its waste by thirty-seven percent. Among its efforts is a backyard composting program, using a network of "master composters." The city offers compact, odor-free bins that use a special variety of earthworms to convert food wastes into soil-like material.³³

Sustainability discussions have taken place in Seattle in several forums. The Global Tomorrow Coalition organized a Sustainable Seattle conference in November 1990, cosponsored by a number of organizations, including Rotary International, the Church Council of Greater Seattle, the city and county governments, and the United Indians of All Tribes Foundation. The

³¹ Ordinance No. 162975, passed by the Portland City Council on 25 April 1990.

³² Carlotta Collette, "Ellensburg Rebounds," *Northwest Energy News*, July/August 1989, p. 38.

³³ John E. Young, *Discarding the Throwaway Society*, Worldwatch Paper 101 (Washington, DC: Worldwatch Institute, 1991), pp. 34-35.

mayor's office is working to integrate the conference's recommendations into the work of the Seattle Task Force on Environmental Priorities and other city committees.³⁴

Mexico City

Mexico City has launched a clean air program that is "without precedent in the world."³⁵ The program, undertaken in response to severe air pollution, eighty-three percent of which was attributed to motor vehicle exhaust, includes adding oxygenated compounds (MTBE) to gasolines; mandating vehicle emissions inspections; retrofitting and relocating industrial pollution sources; and "Hoy No Circula," a day-without-a-car program that restricts people from using their cars on a particular day of the week, based on their license plate number.

Sustainable Urban Rural Enterprise (S.U.R.E.)--Richmond, Indiana

Community involvement is a key component of S.U.R.E., which has set up fifteen citizen task forces to evaluate both long-term sustainability planning and short-term projects. The project seeks to link the city of Richmond, Indiana and surrounding farms, fostering more economic and social interdependence while promoting more ecologically sound energy and land use. Overall direction was set at a planning conference in April 1989. Projects identified as having high priority include protecting a geologically unique river gorge, biomass sewage treatment, expanding the farmers' market, setting up a clearinghouse with materials on sustainability, and converting the community-owned utility to "demand-side" management.³⁶

NEW COMMUNITIES

Efforts to create new, sustainable communities range from building cooperative housing that promotes sustainable lifestyles within existing cities to construction of whole towns. While most of these projects are small, they may help people imagine possibilities for sustainability.

Arcosanti

This five thousand-person town under construction in the Arizona desert aims to incorporate many elements of a sustainable city. Paolo Soleri, its architect and guiding force, describes it as offering a "lean (frugal) but intense mode of life, the only one realistically implementable on planet Earth already host to five billion people 'on top of' the vegetable and animal kingdoms."³⁷ To date, over three thousand people have helped build the city. It is designed to be completely traversable on foot, to foster the arts and community activities, and to maximize access to nature.

Cerro Gordo, Oregon

³⁴ "Sustainable Seattle Forum Launches New GTC Program," *Interaction* (publication of the Global Tomorrow Coalition, Washington, DC), Winter 1990-91.

³⁵ International Council for Local Environment Initiatives, "Local Agenda 21: Mobilizing the World Community of Local Governments for the U.N. Conference on Environment and Development and Beyond" (Cambridge, MA: International Council for Local Environment Initiatives, 1990), p. 6.

³⁶ Findings and recommendations from the Sustainable Urban-Rural Enterprise Workshops held in Richmond, Indiana in October 1989 and information sheets and brochure from the City of Richmond, Indiana.

³⁷ Canfield, p. 103.

A village for twenty-five hundred people, also under construction, Cerro Gordo incorporates energy efficiency and renewable resources (wood and other materials that can be replenished) in its buildings, cluster construction to preserve most of the natural landscape and make automobiles unnecessary within the village, local industry to minimize commuting, and an emphasis on democratic decision-making.³⁸

Multifunction Polis (MFP), Adelaide, Australia

MFP-Adelaide was proposed by the Japanese government and is still in the planning phase. It is envisioned as a network of communities on the outskirts of Adelaide, the entire network housing about a hundred thousand people. Its board report describes it as an international center of innovation in science and technology, education and the arts, "a model of conservation and management of resources and the natural environment . . . a social model for the 21st century based on equitable social and economic development."³⁹ The project would have a strong international orientation, with institutes working on global issues, including environmental problems, and drawing participants from the Asian-Pacific region. The project's proposed location is an area adjacent to polluted mangrove swamps and includes sections with contaminated groundwater and soil. Restoring the local environment would be part of the project and the planned development incorporates some environmental considerations. For example, buildings would be designed to take advantage of solar energy, and people would be encouraged to live within walking distance of their work.

Although these objectives sound promising, the project has been highly controversial. Criticism has focussed on the project's relationship with Japan, how the MFP would be governed, what its environmental impact would be, and who would be able to afford to live in it.⁴⁰ The project's planning process has been criticized for being shrouded in secrecy.

US AND INTERNATIONAL ORGANIZATIONS

The Mega-Cities Project

Recognizing that migration to cities is growing and believing not only that fighting it is futile, but that urbanization can benefit individuals, cities, and the world as a whole, the Mega-Cities Project works to make cities of over ten million people more livable. The project predicts that in ten years there will be twenty-three mega-cities.

The project addresses economic, environmental, and social justice issues. It is particularly concerned with the plight of the urban poor, noting that in mega-city slums "housing and living conditions are terrible; traffic is congested, public transport overcrowded, pollution is intense, and health and safety provision entirely lacking."⁴¹ Project statements suggest that livable cities will require growth that does not destroy the environment; an infrastructure that serves

³⁸ *Ibid.*, p. 101.

³⁹ MFP-Adelaide Management Board, *Status Report* (Adelaide, South Australia: MFP-Adelaide Management Board, December 1990), p. 6.

⁴⁰ John Harwood, "Unsafe at Any Site: The Case against MFP-Adelaide," (Flinders University, Bedford Park 5042, South Australia, 9 August 1990).

⁴¹ Silvio Caccia Bava, "Urban Policies for Social Transformation," *Cities*, vol. 7 no. 1, February 1990.

everyone; reallocating existing resources so they can be used most efficiently, particularly by the poor; and less delay between ideas and implementation. The project focuses on spreading information about what works and providing support and recognition for people who have undertaken successful initiatives. In each of the fourteen cities involved, the project works with people from government, business, and community-based organizations, including nongovernmental organizations, academia, and the media.

The project is based at New York University's Urban Research Center and is directed by Janice E. Perlman. Programs it supports need to be "socially equitable, ecologically sustainable, culturally transferable, and economically viable."⁴²

The International Council for Local Environmental Initiatives (ICLEI)

This organization was created in September 1990 at an international conference sponsored by the Center for Innovative Diplomacy, the United Nations Environment Programme, and the International Union of Local Authorities. The council will provide municipalities with technical assistance by teaching eco-counselors, who will be appointed by participating cities. The eco-counselors will be trained at an international institution to become experts on a particular urban environmental issue. They will serve as resource people for their city and for other communities.

The council is developing two other programs. Its URBAN CO₂ Project will be a collaboration among eleven or twelve cities that have already undertaken successful activities in energy conservation, land-use and building standards, reduction of automobile use, waste management, urban forestry, or civic participation.⁴³ Each city will design a comprehensive program for reducing urban carbon dioxide emissions. Cities that participate will be obligated both to implement the program and to recruit and assist a new city for the program. ICLEI will provide technical assistance to the cities and will prepare a manual analyzing costs and benefits of individual measures. The manual will be disseminated to governments throughout the world, and people will be encouraged to make and distribute copies.⁴⁴

LOCAL AGENDA 21, the third project, involves advocating a role for local governments in the 1992 United Nations Conference on Environment and Development (UNCED). ICLEI "seeks to remedy a critical flaw in the UNCED design, which provides no direct channel for input by local governments into the UNCED discussions."⁴⁵ ICLEI plans to develop a comprehensive report on the role of local governments in dealing with environmental problems. It will work out a detailed agenda for local action to present at UNCED and will facilitate the development of regional planning processes throughout the world.

⁴² Perlman, p. 27.

⁴³ Portland, OR; San Jose, CA; Dade County (Miami), FL; Minneapolis/St. Paul MN; Toronto, Ont.; Saarbrücken, Germany; Hannover, Germany; Copenhagen; Helsinki; Ankara; and Stockholm have been selected. One more city may be added.

⁴⁴ International Council for Local Environment Initiatives, "The URBAN CO₂TM Project," (Cambridge, MA: ICLEI, November 1990).

⁴⁵ *Local Agenda 21*.

Participants at the organization's founding conference emphasized that "no global environmental strategy will succeed without a coordinated agenda for local action."⁴⁶ They identified several practical imperatives for action: the integration of environmental factors into all aspects of municipal management; transforming waste into resources; collaboration between the public and private sectors; and the reclaiming and creation of healthy urban environments through looking at the city as a system, taking charge of the structure of the municipality, working from indigenous systems, using energy techniques appropriate to local conditions, and reintegrating native species into the urban environment.

ICLEI has been designated the environmental arm of the International Union of Local Authorities.

Renew America

Renew America is a national information center for environmental project ideas and programs initiated by government, businesses, or community groups. Its publications include *Environmental Success Index*, which describes more than eight hundred environmental efforts in the United States.⁴⁷

Urban Ecology

In March 1990 the organization Urban Ecology sponsored its first International Ecological City Conference, at which activists, city officials, and urban planners described a variety of approaches to creating sustainable cities. Urban Ecology's own projects include creating a blueprint for ecological urban development for cities throughout the world, establishing a restoration and development fund to support community projects in towns and cities, and facilitating the creation of an international ecocity association as a global network and resource base, as well as local ecology efforts around Berkeley, California.⁴⁸

The Organization for Economic Cooperation and Development

OECD is a consortium of twenty-five nations comprising most of the non-communist industrialized world. Its major purpose is to harmonize member-nation economic policies to facilitate trade and promote prosperity. It also devises policies that could benefit developing nations.

The OECD's Group on Urban Affairs has launched a new program focussing on the role of cities in sustainable development. Sustainable development is considered to include economic, environmental, and social sustainability, and the Group's efforts will be divided among these categories, with an "urban observatory" to "quantify the resource inputs, socio-demographic trends, economic and financial dimensions of urban change and other indicators on which policies and actions must be based."⁴⁹

⁴⁶ Congress Report, p. 3.

⁴⁷ *Renew America Report* (Washington, DC), summer 1990.

⁴⁸ Letter from Richard Register, President, Urban Ecology, dated summer 1990.

⁴⁹ Group on Urban Affairs, Organisation for Economic Co-operation and Development, "The Role of Cities in Sustainable Development" (Paris, 12 March 1990), p. 7.

OECD believes much of the necessary data may be available on a national basis, and its role would include integrating the data. The urban observatory would monitor progress toward economic, social and environmental sustainability. OECD hopes it will become "a powerful tool for assessing current conditions and for giving early warning of future potential urban problems."⁵⁰

Public Technology, Inc. (PTI) and the Urban Consortium

Public Technology, Inc. is financed by membership dues from over one hundred fifty US and Canadian cities and towns and from partnerships with private industry and other groups. Its parent organizations are the International City Management Association and the National League of Cities.⁵¹

PTI has a special network, the Urban Consortium, which is made up of about fifty US cities and counties with over four hundred thousand people. The consortium has an environmental task force, which works with the EPA's Office of Research and Development. It helps governments take advantage of EPA services and helps the EPA shape programs.

PTI also receives funds from Congress, through the Department of Energy's Office of Technical and Financial Assistance, to sponsor special projects. Among these is the San Jose/San Francisco/Portland Sustainable Cities Project.

Institute for Local Self-Reliance

The Institute for Local Self-Reliance does research and policy development on the economic advantages of conservation efforts and offers technical expertise for communities working to develop ecologically sound programs. It is particularly interested in promoting efforts that involve both business and community development organizations.⁵²

US Conference of Mayors

Membership is open to mayors of cities of over thirty thousand. The conference provides technical assistance to cities, compiles statistics, takes the mayors' annual comprehensive plan to the US Congress, and lobbies for relevant legislation. The conference has an energy and environment task force, which has focussed largely on solid waste management issues.⁵³

The International Union of Local Authorities (IULA)

IULA provides opportunities for local governments to share information, have some impact on international organizations such as the United Nations and the European Economic Community, and train their administrators. It holds biennial world congresses. The June 1991 congress was about environment, health, and lifestyle.⁵⁴

⁵⁰ *Ibid.*, p.8.

⁵¹ Public Technology, Inc., program descriptions and telephone conversation with Jack Werner, Director of Environment, Energy and Sustainable Development, 1 February 1991.

⁵² Institute for Local Self-Reliance brochures.

⁵³ Telephone conversations with US Conference of Mayors staff, 1 February 1991.

⁵⁴ International Union of Local Authorities information packet.

ACADEMIC CENTERS

The Center for Sustainable Cities--University of Kentucky

This multidisciplinary center is investigating several questions: Does sustainable development lead to sustainability? If we could design a sustainable city, what would it be like? How do we involve the various sectors in a city in creating new models? Center co-director Richard Levine has expressed the view that a static set of "sustainable" models will not suit the complexities of cities, either politically or practically. He has designed "implants"--new sustainable neighborhoods that could be built within existing cities and that would absorb some of the city's problems, e.g., garbage and sewage, and return positive value to the city, e.g., goods, energy, livability. Gradually these implants would make the city sustainable. He has also designed a sustainable city based on medieval Italian hill towns.⁵⁵ While the center currently focuses on developing theoretical projects, it could take on an advisory role as the sustainable cities movement grows.

11. Conclusion

The sustainable cities movement seems united in the perception that the state of the environment demands action, and that cities are an appropriate forum in which to act. There also appears to be general agreement that active citizen participation is essential for planning and carrying out sustainability activities. Beyond that, there is little unanimity.

Few activities in the industrialized world take place in a sustainable way. Living sustainably is likely to require changes in the food we eat, the clothes we wear, the homes we live in, the things we own, how we get around, what work we do, how we entertain ourselves, how many children we have--virtually every aspect of life. Some sustainable city projects are ambitious undertakings by most standards, but by the standard of sustainability, all of them fall far short, and the gap is not much discussed.

Many environmental theoreticians offer both images of catastrophe and broadly brushed visions of a new society based on ecological principles and other values.⁵⁶ The visions, typically of a simpler life, less materially oriented, and more community-focused and cooperative, are presented as pictures of a better world, but to many people they may be unappealing. To poor city dwellers, they may seem to foreclose a chance to obtain the material goods enjoyed by the middle and upper classes of northern countries. Many in those middle and upper classes may find the values alien and unappealing. Some people's reactions may be affected by a perceived resemblance to counterculture values of the 1960s. People who find the values attractive may be frustrated because most of the theoreticians offer few concrete suggestions about how to begin implementing the changes called for.

⁵⁵ Richard S. Levine and Taghi Rodmard, "Sustainable City Implantations" (Lexington, Kentucky: Center for Sustainable Cities, College of Architecture, University of Kentucky) and Richard S. Levine, "The Future Medieval City," *spazio e societa / space & society*, April-June 1987.

⁵⁶For example, Thomas Berry, *The Dream of the Earth* (San Francisco: Sierra Club Books, 1988).

Such visions are explicitly discussed in some of the projects to create new communities, but, understandably, people working to make existing cities more sustainable have chosen to be vague about visions that would probably be controversial and have focussed instead on smaller steps that they hope will gradually alter people's perceptions and values.

Missing from most of the visions of a sustainable society, prescriptions for new economic systems, or even descriptions of new technologies, is much discussion of how the enormous changes the authors propose could be brought about. William D. Ruckelshaus has called such change a revolution comparable in scale to only two others in human history and unique because it will have to be conscious.⁵⁷ The steps to take to make the social, political and economic changes could actually happen are given relatively little attention.

Social change movements--for example, the civil rights, women's, anti-Vietnam War, anti-nuclear-weapons, and anti-nuclear power movements of the past thirty years in the United States--have tended to be predominantly one group of people demanding that another group make specific, limited changes. Sustainability requires that everyone change in many areas, including some that have traditionally been considered, at least in US society, the private concerns of the individual. Examining the successes and failures of other social movements is likely to offer helpful clues for a movement for sustainability, but current sustainable city projects may offer the most useful information. Many are small-scale practical experiments in achieving community action for social change. Looking closely at how they have sparked community involvement may offer important clues to filling in the implementation piece missing in most sustainability theory.

For the sustainable city movement, the primary challenge may be to develop ways that citizens can come together to look clearly at their unsustainable activities and, using the experiences of other cities and the unique qualities of their own, develop a vision for their community that is empowering rather than alienating and figure out acceptable, even exciting, ways to achieve it.

⁵⁷See page 1.

Appendix
Partial List of Relevant Organizations and Contact People

Center for Sustainable Cities: Richard Levine, College of Architecture, University of Kentucky, Lexington, Kentucky 40506. (606) 257-7617.

City of Portland: Sue Anderson, Energy Office, 1030 Portland Bldg., 1120 SW 5th, Portland, OR 97204. (503) 796-7418.

City of San Francisco: Cal Broomhead, Bureau of Energy Conservation, Public Utilities Commission, 110 McAllister, Rm. 402, San Francisco, CA 94102. (415) 864-6915.

City of San Jose: Rita Norton, Office of Environmental Management, 777 N. First Street, San Jose, CA 95112. (408) 277-5533.

City of Vancouver: Task Force on Atmospheric Change, 453 W. 12th Ave., Vancouver, B.C. V5Y 1V4, Canada.

Chattanooga Venture: Eleanor Cooper, 506 Broad Street, Chattanooga, TN, 37402. (615) 267-8687.

Florida House Foundation: Henry Osborn, 2477 Stickney Point Rd., suite 114 A, Sarasota, FL 34231. (813) 922-5666.

Institute for Local Self-Reliance: 2425 18th St. NW, Washington, DC 20009. (202) 232-4108.

International Union of Local Authorities: PO Box 90646, 2509 LP The Hague, Netherlands.

International Council for Local Environmental Initiatives: Jeb Brugmann, Acting Secretary-General, 763 Massachusetts Ave., Cambridge, MA 02139. (617) 491-6124.

Mega-Cities Project: Janice Perlman, Director, New York University, 4 Washington Square North, New York, NY 10003. (212) 998-7520.

Organization for Economic Cooperation and Development: Siegfried Brenke, Head, Urban Affairs Directorate, 2, rue Andre-Pascal, 75775 Paris CEDEX-16, France.

Project Rebound: Michael Grady, Energy Planner, Washington State Energy Office, 809 Legion Way SE, FA-11, Olympia, WA 98504-1211. (206) 586-8142.

Renew America: Tina Hobson, Executive Director, 1400 16th St., NW, suite 710, Washington, DC 20036.

Sustainable Urban Rural Enterprise: Andrew Euston, room 7244, HUD, Washington, DC 20410. (202) 708-2504.

S.U.R.E. Richmond, Indiana Project: Lynn Johnstone, Director/Special Projects Coordinator, Energy Department, 50 North 5th St., Richmond, Indiana 47374. (317) 983-7202. Robert J. Koester, Director, Center for Energy Research/Education/Service, Muncie, Indiana. (317) 285-1135.

Urban Consortium: Jack Werner, Public Technology, Inc., 1301 Pennsylvania Ave., Washington, DC 20004. (202) 626-2400.