

FINAL REPORT OF THE TASK FORCE

**STUDYING SUSTAINABLE
DEVELOPMENT (HJR 536)**

**TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA**



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I. INTRODUCTION

The task force on sustainable development was created pursuant to House Joint Resolution 291 of the 1994 Session of the General Assembly (Appendix A) and was continued pursuant to House Joint Resolution 536 of the 1995 Session (Appendix B). The task force was composed of six members of the House of Delegates, four members of the Senate, six citizens appointed by the Governor, and the Secretaries of Commerce and Trade and Natural Resources, who served as nonvoting ex officio members. Delegate David G. Brickley served as the chairman of the task force during 1994, and Delegate Clarence E. Phillips assumed the chairmanship for the study's second year.

House Joint Resolution 291 (1994) directed the task force "to study sustainable development" and to "assess current sustainable development initiatives in the Commonwealth and other areas, develop a statewide strategic plan for sustainable development, and recommend appropriate actions which state and local governments, citizen groups, and nonprofit organizations, especially in rural areas of the Commonwealth, might consider for implementation." The resolution recites that "the term 'sustainable development' describes economic development which protects environmental resources and which is characterized by local communities that are diverse, productive and adaptable." HJR 536 (1995) continued the task force and stated that "the charge of the task force shall continue as set forth in HJR No. 291 (1994)."

II. BACKGROUND

A. THE CONCEPT OF SUSTAINABLE DEVELOPMENT

Though it has been called a "buzzword," users of the term "sustainable development" have not reached a consensus as to its meaning.¹ The history of the sustainable development concept provides a starting point for a review of the definitions given to the term. Reviewing various definitions of sustainable development and related concepts illustrates the breadth of possible interpretations.

1. Origins of the Idea of "Sustainable Development"

The terms "sustainable development" and "sustainability" came into wide use in the late 1980s following the publication of the report of the World Commission on Environment and Development (WCED) in London in the spring of 1987. The report, entitled Our Common Future, defined sustainable development as development that meets the needs of the present

¹Timothy Beatley and Davis J. Brawer, "Sustainability Comes to Main Street," Planning (May, 1993), p. 16.

generation without compromising the ability of future generations to meet their own needs. The WCED was created by the United Nations General Assembly in 1983. Chaired by Norwegian Prime Minister Gro Harlem Brundtland, the WCED is often referred to as the Brundtland Commission.

The report was a summons to accept the new concept of sustainable development and to recognize that neither environmental protection nor economic development is sustainable without proper attention to both. Our Common Future included policy alternatives as well as organizational and institutional structures to manage these changes. The central theme that emerged was that the current trend of development is degrading the environment and leaving increasing numbers of people poor. As the world's population increases, it is unclear whether the environment could handle the growth given existing development patterns.

Our Common Future has become the most widely used planning document for sustainable development initiatives worldwide. However, it was intended only to provide general directions. It has been noted that:

There is no single, shiny black box labeled "sustainable development," with a series of buttons we can push to get a neat print-out of actions required to achieve sustainability in the fields of agriculture, energy, transportation, manufacturing, forestry, fishing, or any other. In short, there is no substitute for the hard work of thinking through the implications of sustainable development ourselves, in each community and in each sector, openly debating and discussing our conclusions, and in that way building a foundation of public consensus for policy change and at all levels.²

The groundbreaking work of the Brundtland Commission culminated in the convening of the United Nations Conference on Environment and Development (UNCED) on June 13, 1992, in Rio de Janeiro, Brazil. The goal of UNCED, also referred to as the Earth Summit, was to develop strategies and programs to reverse significant negative environmental trends and to promote development that is environmentally sound and sustainable. The primary outcome of UNCED was Agenda 21, the agreement adopted by all 172 participating nations at the Earth Summit addressing sustainable global development.

More than three years in preparation, Agenda 21 is a comprehensive plan of action offering detailed solutions seeking to reverse the environmental degradation of the planet while providing humanity with a future that is environmentally sound and economically sustainable. Agenda 21 addresses 40 separate sections of concern and outlines 120 action programs. The main program areas are grouped in seven central themes, as follows:

- Quality of Life on Earth. The authors of Agenda 21 adopted the premise that while much of the world's population faces a deteriorating quality of life due to poverty, malnutrition, unemployment, population growth, lack of health care, and pollution, a minority sustains a

²Donald R. Lesh and Diane G. Lowrie, Sustainable Development: A New Path for Progress (The Global Tomorrow Coalition, Washington, DC, 1990), p. 26.

lifestyle based on highly wasteful consumption patterns and pollution-generating production processes. Confronting these two problems requires people in developing countries to be enabled to achieve sustainable livelihoods which do not destroy the environment or undermine the resource base upon which they rely. Simultaneously, the inefficient consumption patterns of industrialized nations which encourage resource waste must be drastically modified. The fundamental goal of achieving a sustainable living for all people entails the eventual eradication of poverty world-wide, the availability of healthy and equitable livelihoods for all, and the implementation of consumption patterns that drastically reduce damage to the environment.

- Efficient Use of the Earth's Natural Resources. In order to sustain the yield of the Earth's renewable and nonrenewable resources far into the future, more efficient and environmentally sound methods of their utilization and preservation must be developed. Premised on the idea that there are finite limits both to the Earth's resources and its capacity to handle the wastes of human society, this second theme focuses on the need to reverse the destruction of renewable resources and to implement strategies to conserve and provide for the sustainable use of our nonrenewable resources. Topics subsumed by this theme include sustainable agriculture, developing coherent water management policies, preventing desertification, changing patterns of energy production and use to those that rely more on efficiency and environmentally sound energy sources, protecting forests, and preserving biological diversity.
- Protection of Our Global Commons. The atmosphere and oceans, which constitute global resources outside national boundaries, are characterized as "global commons." Problems addressed in this sector include ozone layer depletion, climate change, acid rain, marine resource depletion, and coastal area degradation. Regional and global agreements are advocated to ensure the fair and responsible use of global resources which are outside national boundaries.
- Management of Human Settlements. The fourth theme of Agenda 21 addresses the physical, social, and economic conditions of the settlements where people live. The repercussions of rapid and often uncontrolled urban expansion, which include the breakdown of urban services, the spread of slums, and the decline of society, pose the most immediate threat to human well-being and the environment. This theme offers plans for both the environmental and developmental management of urban areas.
- Chemicals and the Management of Waste. This theme posits that a continuation of increases in industrial production and excessive consumption patterns will generate sufficient waste and pollution to overwhelm economic development. Action programs adopted in this section include plans to reduce waste generation, recycle waste materials into useful products, find safe methods to dispose of human and chemical waste, and eliminate illegal trading in hazardous waste.
- Sustainable Economic Growth. The world should work to accelerate the correction of economic problems on a basis which is sustainable well into the future. Sustainable development and environmental soundness must be integrated into all levels of political and economic decision-making. Reorienting the system of economic accounting to reflect the

true costs of development and resource use can allow market forces to act as a powerful stimulant for a global transition to a sustainable society. Consideration of the environmental costs of projects and policies will give protection of the environment a proper place in the market economy of the world.

- Implementing Agenda 21. While the preceding six themes form the core of Agenda 21, an essential ingredient for their successful implementation is the active and full participation of all groups in society. The seventh theme of Agenda 21 addresses the active participation and responsibility of all people for implementation of the other six action themes. Areas where change is advocated as essential to their implementation include public education, access to information, development of environmentally sound technology, and improvements to the legal and regulatory framework as it pertains to the environment and development. A substantial flow of financial resources to developing countries must be made to achieve global environmentally sound and sustainable development. The United States did not make a commitment at the Earth Summit to fund development based on a percentage of its gross national product. ³

Following UNCED, the UN Commission on Sustainable Development (CSD) was formed to monitor implementation of Agenda 21 and to review the work of UN agencies, international financial institutions, and international laws. At its first meeting in June 1993, the CSD agreed to focus on different cross-sectoral and sectoral issues each year, leading to an overall review of implementation of Agenda 21 in 1997. National governments and international organizations will submit annual reports summarizing their sustainable development efforts with respect to specific issues. For 1994, the agenda includes the cross-sectoral issues of consumption patterns, finance, technology, and international policies to accelerate sustainable development, and the sectoral issues of health, human settlements, fresh water, toxic chemicals, and hazardous and radioactive wastes. ⁴

2. Defining Sustainable Development

a. *The term*

The definition and application of sustainable development is constantly evolving. It has been called a paradigm that has a distinct meaning but is flexible enough to apply to the broad base of sectors it encompasses. Sustainable development has also been criticized for appearing to mean anything to anybody, and to have so many definitions that it has no meaning at all. ⁵

³Daniel Sitarz, ed., Agenda 21: The Earth Summit Strategy to Save Our Planet (Earthpress, Boulder, CO, 1993), pp. 8-26.

⁴Patricia Scruggs, Guidelines for State Level Sustainable Development (Center for Policy Alternatives, Washington, DC, 1993), p. 14.

⁵Id., p. 3.

The most commonly used definition of sustainable development was established by the WCED in Our Common Future: "Development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs." It is by its nature flexible; what is sustainable depends on the number of people now and in the future, the demands they place on the system, the system's physical and biological processes, and the investment society is willing to make to overcome constraints in the system. ⁶

The following descriptions of sustainable development illustrate the concept's elasticity:

- "Sustainable development is positive socioeconomic change that does not undermine the ecological and social systems upon which communities and societies are dependent. Its successful implementation requires integrated policy, planning, and social learning processes; its political viability depends on the full support of people it affects through their governments, their social institutions and their private activities." ⁷
- "Sustainability is the nascent doctrine that economic growth and development must take place, and be maintained over time, within the limits set by ecology in the broadest sense -- by the interrelations of human beings and their works, the biosphere and the physical and chemical laws that govern it. The doctrine of sustainability holds, too, that the spread of a reasonable level of prosperity and security to the less developed nations is essential to protecting ecological balance, and hence essential to the continued prosperity of the wealthy nations. It follows that environmental protection and economic development are complementary rather than antagonistic processes." ⁸
- "Sustainable development is best understood as a process of change in which the use of resources, the direction of investments, the orientation of technological development, and institutional change all enhance the potential to meet human needs both today and tomorrow." ⁹
- "Sustainable development is not a single policy or plan that is incorporated into one department or function. It is a framework for decision-making to be used across all sectors and at all levels. It is not a strategy that can be incorporated into ten easy steps. It is a vision --a set of principles--for policies, relations, and behaviors that take time and require institutional changes." ¹⁰
- Sustainable development "is a dynamic process of planning, acting, learning, and reformulating plans in light of experience gained. It is also a community based venture, ultimately dependent upon the insights and ingenuity of a very diverse range of local people, who together provide both the seeds and the roots of sustainability." ¹¹

⁶Gordon Orians, "Ecologi Sus," Environment (Vol. 32, No. 9, November 1990), p. 10.

⁷Dr. William E. Rees of the University of British Columbia, quoted in Lesh and Lowrie, *supra*, p. 27.

⁸William D. Ruckelshaus and Michael A. Gruber, "Toward a Sustainable World," Scientific American (October 1989), p. 29.

⁹Gregory G. Lebel and Hal Kane, Sustainable Development: A Guide to Our Common Future (Global Tomorrow Coalition, Washington, DC, 1989), p. 3.

¹⁰Scruggs, *supra*, p. 8.

¹¹Clinch Powell Sustainability Development Forum, Sustainable Development for

It has been argued that the abstractness of the concept of sustainable development is a major part of its strength, and the fact that there is room for contrasting definitions from a variety of perspectives encourages broader participation in the debate. The Organization for Economic Cooperation and Development (OECD) reported in October 1989 that they should avoid spending time on the issue of a definition of sustainable development because "[t]here are at least 64 definitions already, and the OECD should not add to the confusion." ¹²

If the various permutations of sustainable development share one belief, it is that economic growth and environmental protection are linked. The Business Council on Sustainable Development, in a 1992 report entitled Changing Course, concluded that "the quality of present and future life rests on meeting basic human needs without destroying the environment on which all life depends," and that prudent economic expansion is essential to "improve the livelihoods of the poor, to sustain growing populations, and eventually to stabilize population levels." ¹³ Russell E. Train, former Administrator of the EPA, has written that "[e]conomic and environmental well-being are mutually reinforcing goals that must be pursued simultaneously if either one is to be reached. Economic growth will create its own ruin if it continues to undermine the healthy functioning of Earth's natural systems or to exhaust natural resources. By the same token, healthy economies are most likely to provide the necessary wherewithal for investments in environmental protection." He contends that sustainable development initiatives will themselves bring major economic benefits: "The economic advantage of efficiently using materials and energy is obvious, and the domestic production and use of environmentally sound technologies will reap profits for both the U.S. firms that sell them and for those that use them."

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b. "Development"

An interesting aspect of the debate over the meaning of sustainable development relates to the implications of "development." Colin Isaacs of Toronto contends that sustainable development means only sufficient development to meet the globe's economic and environmental needs, and does not mean "sustainable economic development." He emphasizes that it is the environment, rather than the economy, that is sought to be sustained. ¹⁵ Dr. William Rees concurs that most of the discussion of sustainable development incorrectly emphasizes the need to sustain economic growth, and assumes that the environment can be "accounted for" through greater efficiency in resource use, improved technology, better pollution control, and wider use of environmental assessment. According to Dr. Rees, this incremental approach would result in "little more than a somewhat better-dressed version of the status quo." ¹⁶

Northeast Tennessee and Southwest Virginia (Abingdon, 1994), p. 33.

¹²Lesh and Lowrie, *supra*, p. 13.

¹³Business Council on Sustainable Development, Changing Course (1992), quoted in Global Tomorrow Coalition brochure, *supra*.

¹⁴Russell E. Train, "A Call for Sustainability," EPA Journal, Vol. 18, Number 4 (September-October 1992, Washington D.C.), pp. 7-10.

¹⁵Lesh and Lowrie, *supra*, p. 16.

¹⁶*Id.*

Others have adopted a more favorable view of the economic development aspects of sustainability. Frederic Sargent has distinguished economic growth from economic development. A developing economy is "characterized by increasing productivity and the creation and expansion of a more diverse mix of business and economic activities for both internal and external matters."¹⁷ He advocates an economic development strategy with the potential to conserve resources, increase local productivity and equitably distribute the profits. The elements of sustainable economic development include emphasizing human development, expanding local control of resources, increasing internal investment capacity, and changing economic and social structures to increase opportunity and reduce dependency.¹⁸

In Our Common Future, the Brundtland Commission did not espouse sustainable economic growth, which the book called "an oxymoron in a world characterized by finite spaces and resources." The Commission concentrated on development, which is a broader and quite distinct concept. Dr. Herman Daly of the World Bank has written that although sustainable growth and sustainable development are used synonymously, they have distinct characteristics. Growth refers to expansion in the scale of the physical dimensions of the economic system, while development refers to a qualitative change of a physically nongrowing economic system in a state of dynamic equilibrium maintained by its environment. What is being "sustained" in sustainable development is a level of physical resource use rather than a rate of growth of resource use. What is being "developed" is the qualitative capacity to convert that constant level of physical resource use into improved services for satisfying human wants.¹⁹

Patricia Scruggs characterized the distinction between growth and development in simpler terms. Growth is a quantitative term meaning in economic terms the production and consumption of more goods and services. Conversely, development means the ability to improve without physical expansion. Consequently, she has advocated a system of gauging sustainable development by a "quality of life" yardstick rather than a "standard of living" measure because the latter is a quantitative term that measures "how much" rather than "how well."²⁰ The Global Tomorrow Coalition echoes her call for new resource accounting indicators. The Coalition stated that an intrinsic concept of sustainability is an acknowledgment that the gross national product does not permit the quantification of economic values. The costs of resource depletion and environmental degradation, as well as the benefits of economic development, should be included in the socio-political judgment as to what constitutes "progress."²¹

A unique perspective is provided by the New Zealand Ministry for the Environment, which favors the term "sustainable management" rather than sustainable development. It defines the term as "managing our use of the environment so we don't end up with species extinction, over-exploitation of resources, and expensive pollution clean-ups. This doesn't mean we have to

¹⁷Frederic O. Sargent, Paul Lusk, Jose A. Rivera, and Maria Varela, Rural Environmental Planning for Sustainable Communities (Island Press, Washington, D.C., 1991), pp. 182-183.

¹⁸Id.

¹⁹Lesh and Lowrie, *supra*, pp. 15-16.

²⁰Scruggs, *supra*, p. 7.

²¹Lesh and Lowrie, *supra*, p. 15.

shut up shop and stop using resources. But what we have to do is think more carefully about the impacts of our decisions and what they will mean in the long term." ²²

c. Lists of concepts

Rather than enunciating a concise definition of sustainable development, many authors have prepared lists of the concept's intrinsic themes. One of the shorter of these lists, compiled by the Center for Environmental Management, suggests that sustainable development exhibits four central characteristics: economic security; ecological integrity; quality of life; and empowerment and responsibility. ²³

According to the lengthier list offered by the Canadian organization Guideposts for the Future, activities are sustainable when they (i) use materials in continuous cycles, (ii) use continuously reliable sources of energy, and (iii) "come mainly from the potentials of being human," such as communication, creativity, coordination, appreciation, and spiritual and intellectual development. Activities are not sustainable when they (i) require continual input of nonrenewable resources, (ii) use renewable resources faster than their rate of renewal, (iii) cause cumulative degradation of the environment, (iv) require resources in quantities that could never be available for people everywhere, and (v) lead to the extinction of other life forms. ²⁴

The Global Tomorrow Coalition in 1990 defined four essential elements of sustainable development: (i) satisfaction of human needs, including not only basic needs, but cultural activities and other amenities; (ii) freedom from unwanted dependence, including not only personal and political liberties, but freedom from economic dependence through the burdens of foreign debt; (iii) control of population growth, with a range of strategies to achieve stabilization; and (iv) maintenance of natural and life support systems, including protection of biological systems, global common areas, and the world's genetic pool. ²⁵

Patricia Scruggs has supplied yet another list, which sets forth 10 principles of sustainable development: (i) integrate the environment and the economy into all levels of decision-making and utilize economic appraisals that fully value the costs of goods and services, including environmental and social impacts; (ii) revise how growth is measured and valued to make it equitable and long-term, and to reflect quality of life elements; (iii) incorporate economic incentives to encourage the conservation of resources, to reflect the total costs of goods, and to shift the burden of taxes and fees from the public to the user; (iv) reorient technology to better manage risks and to efficiently use materials and energy; (v) conserve and enhance the natural resource base (air, water, soils, biological diversity); (vi) enhance interdisciplinary science and education to improve understanding of and to make available information on natural resources and their interrelationships; (vii) adjust the use of natural resources and the ability of environmental and economic systems to reflect carrying capacity; (viii) ensure population stabilization through access to education, health care, and family-planning services; (ix) improve

²²Id., p. 28.

²³ELI, Working Papers for Blueprint for Sustainable Development of Virginia (June 1994), p. 1.

²⁴Lesh and Lowrie, *supra*, pp. 27-28.

²⁵Id., p. 14.

governance through coordinated efforts that link agencies, departments, and central government with local government, incorporate project appraisal techniques, and involve citizens in decision-making; and (x) "promote values and ethics that reflect sustainable development"--the interdependence of the environment and the economy, the importance of fairness and equity for long-term prosperity, and the need for cooperation and community. ²⁶

3. Detractors

Notwithstanding its growing acceptance, sustainable development is not without its detractors. William Perry Pendley, President and Chief Legal Officer of the Mountain States Legal Foundation, argues that "[t]he unreality of Washington is nowhere more evident than in its embrace of 'sustainable development' as a wise or even achievable public policy." Even if the bureaucracy was capable of defining the term, "the economic distress accompanying such decision making would be enormous." In his words, "the call for 'sustainable development' makes no sense because it is based, in part, upon the notion that technology has increased America's standard of living at the expense of the environment."²⁷ He disputes the assumption that we are running out of resources, contending that "every generation has left the next generation with more, not fewer, usable resources."²⁸ Other skeptics include Jane Shaw and Richard Stroup of the Political Economy Research Center in Bozeman, Montana. They contend that the best way to achieve sustainability will be to allow the market to spur innovation, reward resource conservation, and hold decision makers generally accountable.²⁹

B. CURRENT SUSTAINABLE DEVELOPMENT INITIATIVES

House Joint Resolution 291 charges the task force with assessing current sustainable development initiatives not only in the Commonwealth but in other areas. Sustainable development activities are underway by the federal government, by other state governments, and by local governments in Virginia and in other states. Several of these projects are described below, while Virginia's local initiatives are described in the Deliberations section of this report.

1. President's Council on Sustainable Development

On June 29, 1993, President Clinton issued Executive Order 12852 creating the President's Council on Sustainable Development. The 25-member Council was charged with developing specific policy recommendations for a national strategy for sustainable development that could be implemented by the public and private sectors. The Council was also charged with

²⁶Scruggs, *supra*, p.8.

²⁷ William Perry Pendley, "No So-called 'Sustainable Fixes' are Required," EPA Journal, Vol. 18, Number 4 (September-October 1992. Washington D. C.), pp. 37-38.

²⁸ *Id.*, p. 38.

²⁹ Jane Shaw and Richard Stroup, "A Skeptical Twist," EPA Journal, Vol. 18, Number 4 (September-October 1992. Washington D.C.), pp. 54-56.

responding to the recommendations set forth in Agenda 21. Specific goals include sponsoring projects that demonstrate and test the viability of the recommendations, establish links with American and foreign nongovernmental organizations, recognizing outstanding sustainability achievements through an annual presidential award, and educating the public about opportunities in sustainable development.

The Council was co-chaired by Jonathan Lash, president of the World Resources Institute, and David T. Buzzelli, Vice President and Corporate Director for Environment, Health & Safety and Public Affairs at Dow Chemical Company. Members included cabinet-level appointees (Agriculture, Commerce, Energy, Interior, and EPA), and representatives from business, environmental groups, civic groups, labor, and philanthropical organizations. Six task forces were established: Principles, Goals and Definitions; Public Linkage, Dialogue and Education; Sustainable Communities; Energy; Natural Resources Management; and Eco-efficiency. The Council also established liaison groups working on demonstration projects and the annual presidential award. The Council was established for a two-year term.

On May 16, 1994, the Council released its long-term vision of sustainable development and the working draft of its defining principles. The public was invited to submit comments and suggestions to help define what a sustainable America will look like in 50 years. The vision and principles were designed to put into perspective how to develop a healthy economy while preserving the integrity of the nation's natural resources. The Council's vision:

is of a life-sustaining earth. We are committed to the achievement of a dignified, peaceful, and equitable existence. We believe that a sustainable U.S. will have an economy that equitably provides opportunities for satisfying livelihoods and a safe, healthy, high quality life for current and future generations. Our nation will protect its environment, its natural resource base, and the functions and viability of natural systems on which all life depends.³⁰

A copy of the proposed 15 Principles of Sustainable Development are attached as Appendix C.

2. State Initiatives

Several states have adopted a systematic approach to sustainable development. In these jurisdictions, strategic planning processes have been used to develop comprehensive programs for identifying and implementing opportunities for sustainable development.

Florida: On March 3, 1994, Florida Governor Lawton Chiles issued an executive order creating the Governor's Commission for a Sustainable South Florida. Goals of the Commission include improving coordination among and within the public and private sectors regarding activities affecting the Everglades ecosystem; examining the effects of continued development

³⁰ President's Council on Sustainable Development, Information Packet (Washington, DC, June 1994), p. 9.

and agriculture on the natural resources within the ecosystem; recommending actions for restoration, management, preservation, and protection of the resources; recommending strategies for ensuring that the South Florida economy is based on sustainable economic activities that can coexist with a healthy Everglades; and assisting in promoting and implementing its recommendations. The 35 members of the Commission include two legislators and representatives from the business community, public interest and environmental organizations, local and regional governments, and state government secretariats. Representatives from federal agencies serve as nonvoting members.

Kentucky: In 1992, the Kentucky General Assembly created the Kentucky Long-Term Policy Research Center to bring a long-term perspective into state government decision making. The Center has received a U.S. EPA grant to develop a national demonstration model to integrate economic, social, technological, and environmental considerations. Governor Brereton C. Jones and other state leaders initiated efforts that evolved into the first national conference on sustainability entitled "From Rio to the Capitols: State Strategies for Sustainable Development." The conference, held in Louisville in May 1993, provided a forum for over 1200 state policy makers and other interested persons to educate each other on process and institutional structures as well as sector issues.

The Kentucky Sustainable Practices Initiative has been described as "a collaboration of multiple, complementary efforts with the goal of producing a comprehensive program . . . integrated under the leadership of the Governor and the Natural Resources and Environmental Protection Cabinet and Economic Development Cabinet."³¹ It includes the Kentucky Roundtable on Sustainable Development, which reports to the Board of Economic Development; the Economic Development Strategic Plan, developed with the participation of over 800 citizens contributing to 50 task groups; the Environmental Technology Consortium, which promotes sustainable technologies; and a Biodiversity Task Force, which, in 1995, held 13 public meetings across the state to receive public comment on possible biodiversity policies.

Minnesota: In January 1993, the Governor launched the Minnesota Sustainable Development Initiative. The Initiative consisted of seven 15-member teams, and staffing was provided by the Environmental Quality Board (EQB). Teams were established in the sectors of energy, agriculture, forestry, manufacturing, mining, recreation, and settlement. Each team was charged with setting a 50-year vision, developing a set of sustainable development principles, identifying main barriers to the articulated vision, and preparing a set of appropriate strategies for its sector. After a year's work, each team produced a report. In February 1994, the teams received public feedback at the Minnesota Congress on Sustainable Development.

According to Rolf Nordstrom of the Minnesota EQB, the biggest benefit of the Sustainable Development Initiative has been the ability of the variety of interests represented on each sector team to develop a long-term vision. Each sector was then able to work backward to develop a consensus on strategies that would lead to the shared vision.

³¹ Scruggs, Patricia. May, 1995. Seeds of Change: State Efforts Leading the Way Toward Sustainability. Printed by the State of Kentucky.

In the second phase of its sustainability project, the legislature established a 17-member task force, six of whose members are legislators, with the principal task of studying growth management and land use decisions. The task force released a draft strategic plan, entitled *Challenges for a Sustainable Minnesota*, in the summer of 1995. The task force also drafted proposed legislation, the Minnesota Sustainable Development Act, which was designed to encourage sustainable development statewide.

Missouri: In the late 1980s, Missouri established an annual gathering called the Partnership for Economic Growth and the Environment. Participants, who include representatives from business and environmental groups and government, shape policy recommendations and develop specific legislative proposals. In 1991, the Partnership, which works through consensus-building dialogues, shaped legislative recommendations addressing climate change and ozone depletion.

New Mexico: In September 1992, New Mexico's Department of the Environment and the Governor's office sponsored a three-day conference entitled "Toward a Sustainable Environment." Over 900 people from government, business and environmental groups, policy and law institutes, and public health organizations explored the concepts of sustainable development and sought to develop recommendations for sustainable development in the state. Recommendations from the conference were submitted to the 1993 legislature. The conference report to the legislature summarized suggestions addressing planning for a sustainable society, land use and natural resource issues, environmental economics, and federal, state and tribal programs.

New York: Columbia University has convened the Sustainable Development Initiative for New York and the Tri-State Area. Covering New York, Connecticut, and New Jersey, the Initiative has two elements: The Global and Regional Environmental Research Center and the Round Table on the Environment and the Economy. The Research Center conducts and coordinates research and formulates policy studies on the integration of environmental, energy, natural resource, and global competitiveness considerations into economic policies. The Round Table seeks to build consensus among various sectors of society for the development of effective and efficient long-term economic and environmental programs that promote sustainable development. The Round Table is modeled after the Canadian national and provincial round tables.

North Carolina: In 1991, the University of North Carolina's Environmental Resource Program in the School of Public Health initiated the Sustainable North Carolina Project. In 1993, the Program received funding to launch a five-year initiative to develop a vision for sustainable development in the state. The Program established a 25-member advisory committee composed of representatives from state and local government, business, academia, and environmental and civic organizations to establish the initial structure and vision of the program. Goals of the Project include (i) initiating a communications program; (ii) holding a statewide conference to develop ideas for public and private changes; (iii) working with the General Assembly and private and nonprofit organizations regarding policy issues; (iv) developing resource and educational materials, including a teacher training program; (v) establishing a permanent oversight body to guide and monitor progress toward sustainability and extending

outreach to include the Southeast region; and (vi) developing an index to measure sustainability in North Carolina.

The Project held regional workshops on sustainable development in 1993 and 1994, and in March 1995, held a statewide Consensus Conference on Sustainable Development. In the Spring of 1995, the Project produced two reports, *A Profile of North Carolina: Indicators of Sustainability*, which proposed sustainability indicators for the state, and *Sustainable Development in North Carolina*, which described a number of sustainability efforts around the state. Another report, proposing sustainable development principles that could be adopted for use by local communities, government, businesses, and other organizations, is planned.

Washington: In 1988, Washington launched its Environment 2010 project to develop a clear and comprehensive environmental strategy to identify and assess environmental and natural resource management issues, anticipate emerging issues, and set priorities among them. The project involves a steering committee of 13 agency directors and representatives from two federal agencies. The committee directed a four-step approach including analysis, vision, outreach, and action. The group developed 75 recommendations for government, business, and communities addressing 12 challenges representing major discrepancies between the vision for the state and where the environment is or appears to be heading. The 75 recommendations were refined by the Action Strategy Analysis Committee, a forum of policy analysts and program managers from state and federal agencies.

3. In Universities

Impetus for action by institutions of higher education to embrace the concept of sustainable development has been provided by the Talloires Declaration. The signatories of the Declaration are representatives of 20 colleges and universities from around the world calling themselves University Presidents for a Sustainable Future. The Declaration advocates "an equitable and sustainable future for all humankind in harmony with nature," and states that "[u]niversities have a major role in the education, research, policy formation, and information exchange necessary to make these goals possible." The document, named after the town in France where it was signed, calls on university heads to provide the leadership and support to mobilize internal and external resources so that their institutions respond to this urgent challenge.

Professor Richard C. Collins, Director of the Institute for Environmental Negotiation at the University of Virginia, was asked by the Acting Dean of the School of Architecture to convene and facilitate a sustainability roundtable in order to promote cross-departmental exchange and collaboration. The University of Virginia community has recognized that sustainability calls for research and teaching that goes beyond environmental science and environmental design to encompass all disciplines and programs. Potential activities of the roundtable include:

- Sharing information on courses throughout the University that include elements that are important to sustainability;

- Exchanging information on current or potential research relevant to sustainable development;
- Identifying, through the School of Continuing Education's Earth 2020 Program, needs or opportunities that the Commonwealth, local governments, and businesses have in sustainable development; and
- Providing opportunities for faculty to consider ways to collaborate more closely on teaching, funded research, and public service.

Sustainable development has been embraced in other areas of the University. William McDonough, recently appointed Dean of the School of Architecture, has written that "[o]ur present systems of design have created a world that grows far beyond the capacity of the environment to sustain life into the future."³² Mr. McDonough is also an advisor to the President's Council on Sustainable Development. In addition, the Virginia Academy of Science, which is chaired by Professor James Murray of UVa's Department of Biology, has recently endorsed the Talloires Declaration and is advocating the endorsement of the declaration by the heads of universities in the Commonwealth.

Virginia Tech has instituted sustainable agriculture test programs at River Ridge Farm in Grayson County and at the Kentland Research Farm near Blacksburg. According to the federal government, sustainable agriculture is an agricultural system that provides food and fiber in ways that enhance environmental quality, makes efficient use of non-renewable resources, sustains farmers' economic viability, and enhances the quality of life for farmers and society as a whole. Since 1990, several sustainable agriculture projects at Virginia Tech have received federal funding under the Sustainable Agriculture Research and Education (SARE) program.³³

4. Other Sustainable Development Groups

Several other organizations are active in efforts to implement sustainable development in this country. Foremost among these groups is the Global Tomorrow Coalition (GTC). The GTC, founded in 1981, is a forum composed of environmental groups and a wide variety of other organizations such as the Turner Broadcasting System, the Humane Society of the United States, CARE, and several university departments. From 1985 to 1987, GTC served as liaison for William Ruckelshaus, the U.S. member of the Brundtland Commission. It is involved in several of the local initiatives in Virginia with assistance from the Virginia Environmental Endowment. The GTC is also supporting local consensus-based sustainability projects in Palm Beach, Pinellas, and Broward Counties, Florida; Lancaster County, Pennsylvania; Louisville, Kentucky; and Los Angeles County, California.

³² William McDonough, "Design, Ecology, Ethics and the Making of Things," Sermon at The Cathedral of St. John the Divine (New York, 1993), p. 22.

³³ Su Clauson-Wicker, "For the Love of a River," Virginia Tech Magazine, Vol. 16, Number 4 (Summer, 1994), pp.17-19.

Another group facilitating sustainability is the Round Table Informational Forum, a foundation-supported forum that conducts community-level programs for sustainable development based on the model of the Round Tables on Environment and Economy that have existed in Canada's 10 provinces since 1987. The Forum organizers are Linda Starke, who served as editor and production coordinator of Our Common Future, and consultant Patricia Scruggs, who has written many sustainable development reports, including Seeds of Change: State Efforts Leading the Way Towards Sustainability and Guidelines for State Level Sustainable Development. The Forum facilitates one-day intensive workshops for states interested in establishing or enhancing a sustainability initiative. The workshops have been held in Iowa, Kentucky, Alaska, Georgia, Idaho and Missouri. A primary goal of the Round Table Informational Forum is to move beyond raising awareness of sustainable development to promoting its implementation by providing practical information on processes used to institutionalize sustainability in the public and private sectors. The Forum utilizes the three elements that are common to attempts to institutionalize sustainability: (i) the multi-stakeholder representation of all major affected parties; (ii) the use of consensus or alternative dispute resolution methods; and (iii) a strategic planning process that establishes a vision for sustainability and a set of principles to guide policy and planning.

In Guidelines for State Level Sustainable Development, Patricia Scruggs points out that because sustainable development links issues that have been traditionally managed in isolation, separate policies and autonomous institutions may not effectively administer and oversee issues which are becoming increasingly interwoven. She offers a list of four areas of barriers to sustainable development. First, the lack of empirical data and a bias in economic analysis lead to favoring short-term benefits and discounting long-term costs and externalities. Second, institutional constraints, such as segregation of sectors into autonomous departments with little coordination, jurisdictional conflicts, and lack of cohesive objectives between agencies and organizations, impede planned sustainable development. The third barrier is the bureaucratic process, including budgetary constraints, inadequate access to information, and lack of resources. Finally, attitudes and values which favor short-term growth rather than long-term development and which oppose change will impede efforts at sustainability.³⁴

To overcome these barriers, Ms. Scruggs suggests a four-part guideline for states:

- Develop the sustainable framework at a central level, but allow specific planning at regional levels. Once the regional levels have begun to operate independently, the central body can become a support mechanism.
- Ensure environmental, economic, and social integration through strategies and plans that are coordinated between agencies and sectors and between jurisdictions and governments.
- Incorporate economic incentives and instruments to promote sustainable planning and behavior, including incentives to encourage project appraisal and environmental accounting and information sharing.

³⁴ Scruggs, pp. 42,47.

- Ensure that decision-making processes at both the central and regional levels involve a multi-stakeholder approach in order to obtain the needed buy-in, thus reducing the conflict potential and developing implementation plans that can be achieved on a widespread basis.³⁵

III. TASK FORCE DELIBERATIONS

The task force met four times, once in 1994 and three times in 1995. It began its work by receiving a staff briefing on the many concepts of sustainable development, including descriptions of sustainable development initiatives around the Commonwealth and the country. Representatives of several sustainable development projects in Virginia, including the Environmental Law Institute's Blueprint for Sustainable Development of Virginia, the Northampton County Sustainable Development Initiative, the Rappahannock River Valley Project, the Thomas Jefferson Sustainability Council, the Clinch Powell Sustainable Development Forum and the New Century Council, testified about their projects' goals and activities. Representatives of the Global Tomorrow Coalition and the Sustainability Roundtable Informational Forum also addressed the task force and offered their assistance.

The task force then considered some of the elements that are common to the sustainable development projects in Virginia and around the country and began to identify issues that might be addressed by the task force's strategic plan. In exploring some of these issues, the task force asked representatives of several sustainable development initiatives to recommend ways that a statewide strategic plan might encourage and benefit successful projects in the future. Finally, the task force discussed and endorsed several sustainable development goals.

A. SUSTAINABLE DEVELOPMENT PROJECTS IN VIRGINIA

1. Blueprint for Sustainable Development of Virginia

Sustainable development was first introduced on a statewide level with the adoption of House Joint Resolution 653 by the 1993 Session of the General Assembly (see Appendix D). Introduced by Delegate Brickley, HJR 653 encouraged the Governor, state and local officials, and the leaders of educational institutions and civic organizations to work together to prepare a Virginia strategy for sustainable development "to serve as a national model for widespread emulation." Leaders in business, trade unions, educational institutions, youth groups, engineering, science and technology, faith communities, Native American organizations, philanthropy, and supportive civic organizations such as the Global Tomorrow Coalition were urged to participate in the preparation of the strategy. House Joint Resolution 653, which expressed the sense of the General Assembly, did not provide state funding or other assistance in the preparation of the strategy.

³⁵ Id., pp. 44-45.

In response to HJR 653, the Virginia Environmental Endowment launched a cooperative effort, involving business, community and academic leaders, to lay the foundations of a sustainable development strategy for Virginia. This cooperative effort has produced A Blueprint for Sustainable Development of Virginia, released by the Environmental Law Institute on January 31, 1994.³⁶ The EPA and the Andrew W. Mellon Foundation also provided support for the project. The Blueprint, subtitled How Virginia's Citizens, Economy and Natural Resources Can Thrive in the Future, acknowledges that it is a starting point for discussion and a first step in the effort to draft a sustainable development strategy. The authors--James M. McElfish, Suellen Keiner, and Heather Wicke--have attempted to provide a framework for renewing the Commonwealth's prosperity while protecting its environmental resources.

The Blueprint articulates a detailed vision for a sustainable Commonwealth, identifies three impediments to sustainable development and steps for removing them, and profiles eight "building blocks"--areas where action now can bring Virginia's sustainable development vision into focus. The three impediments to sustainable development are a lack of commitment, institutional fragmentation, and uncoordinated planning at both state and local levels. The lack of commitment is attributed to the traditionally short time-frame and individual focus of political decision making. Three interdependent steps to overcome these barriers need to be taken early in the process: (i) establish a sustainable vision to guide state policy-making; (ii) develop a comprehensive, easily accessible data base of statewide information for use at state and local levels; and (iii) create institutions that are capable of planning for long-term, sustainable objectives, with active participation by multiple stakeholders from all Virginia communities.

The eight areas identified in the Blueprint as appropriate for action, with specific recommendations, include:

1. **Managing Growth:** The Commonwealth should enact growth management legislation providing for consistency, consultation, and concurrency. Virginia's investments in infrastructure should increase and should favor approaches that protect renewable resources. Virginia should study and provide incentives for compact development and for in-fill development by private industrial, commercial, and residential projects.
2. **Building Sustainable Industry:** The General Assembly should (i) study the use of private activity bonds to determine how they can be targeted more closely to attracting and expanding sustainable industry; (ii) reinstate Virginia's expired renewable energy income tax credit and study the provision of an energy efficiency investment income tax credit for energy efficiency investments; (iii) consider enacting a new investment tax credit of 10 percent of the one-time cost of converting from present manufacturing processes to more environmentally sound, pollution-preventing processes; and (iv) study whether to enact a risk-pool guarantee program to enhance the availability of capital to new and expanding businesses that are environmentally sustainable. The Commonwealth should increase opportunities in its secondary schools and two-year colleges for training in marketable industrial skills.

³⁶ ELI. Blueprint for Sustainable Development of Virginia, supra.

3. **Preventing Pollution:** The General Assembly should continue to promote pollution prevention by enacting legislation which encourages facilities to reduce their use of toxic compounds, and should adopt a clear numeric goal for statewide reduction in the use of toxic chemicals. The Department of Environmental Quality should expand its technical assistance programs to provide on-site pollution prevention consulting for small businesses and local governments. The Commonwealth should reconsider its position on returnable bottles and other packaging. Virginia should encourage the development of markets for reused and recycled materials. The Commonwealth's recycling goals for local and regional solid waste plans should be improved. Voluntary recycling efforts should be improved.
4. **Sustainable Energy:** Virginia should encourage development of comprehensive demand-side management programs to promote energy efficiency, conservation, and economic development. Demand-side management and environmental factors should be factored into least-cost planning for electrical power. The General Assembly should authorize the State Corporation Commission to investigate alternative energy sources and to promote investment in the development and use of renewable, nonpolluting energy technologies.
5. **Protecting Air Quality:** Virginia should (i) develop and implement strategies that will improve visibility by reducing air pollution; (ii) allow for additional growth by improving its enforcement of pre-construction air quality permit requirements and by carefully scrutinizing all applications for new coal-fired power plants; and (iii) adopt policies designed to reduce vehicle miles traveled and the resulting air pollution.
6. **Protecting Historic Sites and Natural Areas:** Virginia needs to implement and actively enforce its ordinances, zoning classifications and tax incentives that promote preservation of natural areas and historic properties. It should also adopt similar tools to create buffer zones that will protect designated sites. Virginia should adopt new approaches to generate funding to administer and expand state and local programs for protecting natural areas and historic sites.
7. **Managing Water Resources:** Virginia should mandate that its localities work together to develop watershed plans for water management and control. Planning district commissions should be authorized to serve as the institutional bases for regional watershed programs. Watershed managers should be directed to establish more stringent water-quality standards and employ a range of regulatory and management tools that link those standards to watershed management. A water-management data base, including compatible statewide geographic information systems, should be established for each Virginia watershed. Virginia should allocate water on a comprehensive statewide basis, which allocation should be incorporated into, and implemented through, each regional watershed plan. With respect to improving water supplies and sewage disposal, Virginia should (i) ensure that all of its citizens have access to safe drinking water and sanitary wastewater disposal; (ii) initiate an education and public participation program to encourage localities to become involved in decisions setting water quality criteria, issuing discharge permits, and determining water-system expenditures; (iii) fund its Water Supply Revolving Fund (§§ 62.1-203 et seq.) in an amount adequate to meet real needs; and (iv) make funding available, in the form of low

interest loans and grants, to provide water supply systems and sanitary sewage disposal systems.

8. **Strengthening Virginia's Communities:** Virginia should support local community-building by adopting a vision of sustainable development, developing a statewide information network and resource inventory, and identifying economic incentives for communities to encourage them to adopt sustainable development plans and to make efforts to implement their plans. Virginia's localities should make coordinated efforts to move toward a sustainable future.

The authors of the Blueprint conclude that a failure to pursue sustainable development will result in unacceptable resource costs, opportunity costs, and human costs. Potential activities that the Commonwealth can pursue in moving towards sustainability include state legislation that promotes environmentally sound economic development, growth management, and better protection of natural resources and the environment; local adoption of zoning, land-use plans, and economic strategies that coordinate with sustainable development goals; community initiatives that involve all citizens in developing civic strength, protecting valued resources, and building local economic viability; and voluntary efforts launched by businesses, educational institutions, citizen organizations, and civic and church groups.³⁷

2. Northampton County Sustainable Development Initiative

Several distinct but interrelated sustainable development initiatives are underway in Northampton County. According to Steve Parker of The Nature Conservancy, the emphasis on sustainability resulted from the realization that protection of the ecology of the Atlantic barrier islands cannot be separated from development occurring on the mainland. Preservation of the Conservancy's 45,000 acre Virginia Coastal Reserve as part of the last pristine coastal area in the nation depends on working with the local community on economic development that protects the entire ecosystem. This recognition has led to involvement by the Nature Conservancy in innovative affordable housing and wastewater treatment efforts in Northampton County. Sustainability initiatives on Virginia's Eastern Shore include:

- a. **Northampton Economic Forum:** In 1991, the Nature Conservancy, the Citizens for a Better Eastern Shore, the local chapter of the NAACP, and other groups and individuals created the Northampton Economic Forum. The goal of the Forum is providing good jobs for all people while protecting natural resources, which it refers to as "compatible economic development." In December 1992, the Forum published A Blueprint for Economic Growth, which represents the efforts of an action planning process with the goal of building on the area's assets and crafting creative strategies by promoting more widely shared and sustainable development. Financial support for the action planning process was provided by the Ford Foundation, the Virginia Center on Rural Development, the Nature Conservancy, and local contributors. Other assistance was provided by the Corporation for Enterprise Development, a nonprofit economic development consulting firm, and the Eastern Shore of Virginia Economic Development Commission.

³⁷ Id., pp. 6-18.

The Northampton Economic Forum is carrying out an action agenda set forth in the Blueprint, which identifies 25 specific initiatives for addressing the county's most important development opportunities and challenges. The initiatives are grouped in the following six strategies:

1. Establish cooperative and productive partnerships between regional and local civic groups for developing the local leadership necessary to guide and support the county in the future and to build a more positive image;
2. Bring more income into Northampton County through more effective business-attraction efforts, responsible residential development, more value-added industries, and increased exports of services and products;
3. Create career-oriented jobs that offer upward mobility and higher incomes for the unemployed and underemployed by encouraging greater entrepreneurial initiative and by capitalizing on the area's existing home-grown economy;
4. Develop tourism promotion activities, attractions, and amenities that are compatible with the local environment, the county's rural character, and its existing natural resource-based industries;
5. Invest in the residents of Northampton County, especially those who are economically disadvantaged; and
6. More effectively integrate local planning strategies for both conservation and economic development.³⁸

b. Virginia Coast Institute: In September 1993, Old Dominion University and the Nature Conservancy announced the creation of the Virginia Coast Institute. The goal of the Institute is to study and demonstrate ways for a community to preserve its ecosystem and promote sustainable development. The Institute will provide applied research, education, training, and evaluation to help create a world-model sustainable ecosystem, economy, and community.

Specific missions include fostering small businesses and conducting marine science research. Old Dominion University brings access to over \$50 million annually in research grants, and grants are expected to provide the financial basis of the Institute. The Institute is intended to serve as a combination of think tank and classroom for conservationists, university teachers and students, and municipal planners on the Eastern Shore.

c. Virginia Eastern Shore Sustainable Development Corporation: In another effort to implement the theories and plans of sustainable development, the Nature Conservancy is assisting in the establishment of the Virginia Eastern Shore Sustainable Development Corporation (VESSDC), a for-profit, stock company. The purpose of the Corporation is to

³⁸ The Northampton Economic Forum, A Blueprint for Economic Growth (Eastville, December 1992), pp. 12-15.

implement the Northampton Economic Forum's action plan by developing and supporting products, business ventures and land uses that enhance the local economy, achieve community goals, and preserve the environment. The president and chief executive officer of the company is Richard A. Schreiber, formerly vice president and chief business officer of the Colonial Williamsburg Foundation. According to the Nature Conservancy's Greg Low, the Corporation's goal is the creation of 50 businesses, 250 jobs and \$10 million in revenue.

d. Northampton County Sustainable Development Action Strategy: Development of a strategy for sustainability has been funded by a grant from the National Oceanic and Atmospheric Administration through the Virginia Coastal Resources Management Program. The Action Strategy was developed by the county's Sustainable Development task force, which was created in September 1993 and charged by the Board of Supervisors to provide for "concerted action to capitalize on and protect Northampton's world-class natural, cultural, historical and human assets for the ongoing benefit of all citizens."

The Action Strategy identifies six areas for action, including water quality and bird habitat. A key component of the Action Strategy is the Port of Cape Charles Sustainable Technologies Industrial Park, which is being developed in partnership with a broad variety of local, state, federal and private entities. The Board of Supervisors adopted the Action Strategy on June 13, 1994. The Action Strategy was recognized in August 1994 by the National Association of Counties, which named Northampton County one of three counties in the nation to win its Presidential Leadership Award.³⁹

The Sustainable Development Action Strategy is based on four documents created by Northampton County in recent years, including the Eastern Shore Outdoor Recreation Plan, the County's Comprehensive Plan, the Blueprint for Economic Growth, and the Special Area Management Plan. The Action Strategy serves as an implementation mechanism for the Special Area Management Plan. The goal of the Area Management Plan is to create economic reasons to protect coastal resources. The National Oceanic and Atmospheric Administration has committed \$700,000 under the Coastal Zone Management Act for implementation of the Area Management Plan.⁴⁰

A September 1995 progress report on the Northampton Sustainable Development Initiative is attached as Appendix E.

3. Thomas Jefferson Sustainability Council

The Thomas Jefferson Planning District Commission, composed of the Counties of Albemarle, Fluvanna, Greene, Louisa, and Nelson and the City of Charlottesville, has appointed

³⁹ "Northampton recognized nationally for sustainable development plan," Eastern Shore News, August 10, 1994.

⁴⁰ Northampton County Board of Supervisors Sustainable Development Task Force, The Sustainable Development Action Strategy for Northampton County, Virginia (Eastville, VA, June 28, 1994), pp. 10-3 to 10-5.

the Thomas Jefferson Sustainability Council to define "sustainability" for the region and to determine how the area can maintain both a healthy environment and a healthy economy. The Council consists of approximately 25 members drawn from the district. The Council will provide guidance through the next decade to help implement the ambitious Thomas Jefferson Study to Preserve and Assess the Regional Environment.

The first step for the Council was to develop a set of draft principles that were the subject of a community dialogue at Piedmont Virginia Community College in May 1994. The following seven basic principles were approved by the Council for public discussion:

1. Individual Enterprise: Individual rights are respected and community responsibilities are recognized.
2. Community Decision Making: All human and natural needs are respected and conflict is resolved through consensus building. The Community is a collection of diverse human and other biological interests.
3. Full Benefits/Cost Accounting: Achieving social, environmental, economic, and political health has intergenerational costs and benefits which must be weighed. In a healthy society, benefits outweigh costs.
4. Conservation: The integrity of the natural systems will be maintained or improved.
5. Interdependence: Social, environmental, economic, and political systems are acknowledged to be interdependent at all levels.
6. Stewardship/Long Term Focus: The responsibility for future generations' social, environmental, economic, and political health is acknowledged.
7. Finite Resources: The members understand there are limits to growth.

The next step for the Council involves developing goals, benchmarks, and indicators based on the basic principles. Areas covered by the group's draft goals address, among others, building design, financial resources for sustainability, health care, land use planning, local/small business, and transportation. Part of the Council's work involves setting long-range visions and crafting a benchmarking procedure to measure and guide progress.

The Thomas Jefferson Planning District Commission is also assessing its regional environment by projecting growth and resource use, based on existing ordinances, plans, and trends, in order to assess the carrying capacity of the region's environment and to determine what level of future growth is desired by the community.⁴¹

⁴¹ Thomas Jefferson Sustainability Council, Final Principles (1994).

4. Rappahannock River Valley Project

The Chesapeake Bay Foundation, the Rappahannock River Valley Association and the World Wildlife Fund formed a partnership in 1991 for the purpose of successfully integrating environmental protection and economic development to yield a sustainable future for the citizens and communities of the lower Rappahannock River region. The Rappahannock River Valley Project encompasses the Northern Neck and Middle Peninsula Counties of Caroline, Essex, Middlesex, King George, Westmoreland, Richmond, and Lancaster. The Project is advised by the 30-member Rappahannock Initiative Committee (RIC), which includes representatives of local government, businesses, real estate developers, farmers, watermen, and other members of the region's diverse communities.

The RIC has established four working subcommittees, dealing with water quality, living resources, land use, and public awareness, to coordinate work on these issues. The Project has prepared a document, entitled "Vision for the Future," to serve as a blueprint for decisions relating to the region and as a focal point for the Project. Other Project accomplishments include preparing a natural resource atlas, publishing an analysis of growth trends and development in the region, and producing a videotape on the future of the Rappahannock River. The Project intends to sponsor two annual forums on issues related to sustainable development of the watershed. A major effort, spearheaded by the living resources subcommittee, involves working with the U.S. Fish and Wildlife Service to locate a wildlife refuge on the Rappahannock River.¹²

5. Southwest Virginia

The Clinch Powell Sustainable Development Forum is a regional consortium of community organizations, small businesses, and public agencies working for sustainable, locally based development in Southwest Virginia and Northeast Tennessee. The Forum was initiated by the Coalition for Jobs and the Environment, the Appalachian Office of Justice and Peace of the Catholic Diocese of Richmond, the Small Business Center, and the local planning district commissions in 1991. Other participants are drawn from 20 organizations ranging from grassroots community organizations to the Tennessee Valley Authority. Virginia counties represented in the Forum are Lee, Scott, Wise, Dickenson, and Russell; Tennessee counties are Hancock, Hawkins, Carter, Claiborne, and Sullivan. The Forum has received assistance from the Virginia Center on Rural Development of the Department of Housing and Community Development.

The Forum has published a strategic plan entitled "Sustainable Development for Northeast Tennessee and Southwest Virginia," and has initiated several sustainable enterprises. The plan states that the Forum "is motivated by the desire to forge economic strategies that build on, rather than deplete, our human and natural strengths" and that help diversify our economies and communities because traditional activities "have become increasingly marginal in the face of

¹² Rappahannock Initiative Committee, "A Vision for the Future of the Lower Rappahannock River Region." (Tappahannock, 1993).

greater dependence on a small number of employers, many based outside the region and often of an extractive, low value-added nature."⁴³

Work on the strategic plan began in April 1993 and was conducted by three task forces focusing on ecobusiness, land resources, and regional information systems. The Forum's strategic plan document includes a mission statement, a vision statement, a list of fundamental values, three development goals, seven strategies, and three recommended tools.

The goals, which flow from the fundamental values, articulate the Forum's purposes: (i) to create quality jobs through an economic life greatly diversified and locally controlled, and acknowledging that a value-added dimension to resources will increase employment; (ii) to create and support ecologically sensitive businesses; and (iii) to build skills and promote entrepreneurial innovation.

The strategies identified to achieve these goals require increasing:

- Sustainable wood products, including ecologically sensitive logging and value-added wood products enterprises;
- Sustainable home construction, encompassing environmentally responsible renovation;
- Nature tourism;
- Regional information banks, involving regional cooperation among chambers of commerce and creating or enhancing regional information systems;
- Sustainable agriculture, especially fruits and vegetables, locally processed foods, and specialty crops;
- Information about land resources by performing an inventory of resources to streamline sustainable and environmentally compatible development; and
- Recycled materials and energy efficient products.

The first of the specific tools identified by the Forum is a microenterprise program to help businesses with five or fewer employees. The program would offer small loans (less than \$10,000), provide business training, and offer technical support. Beginning in early 1994, one such program--People Incorporated--has been offering microloans and business training to low and moderate income entrepreneurs in Buchanan, Dickenson, Russell and Washington Counties. The second tool identified is business incubators. An incubator is a facility where start-up businesses can share information and administrative support services while receiving below-market rental rates. The third tool is flexible manufacturing networks (FMNs), defined as loose but highly focused arrangements of small businesses which jointly develop, produce and market

⁴³ Clinch Powell Sustainable Development Forum, *supra*, p. 2.

particular products. The Forum cited the model of the Adjustable Systems Design FMN in Athens, Ohio, which manufactures handicapped-accessible kitchen components.

6. The New Century Council

The New Century Council was formed by leaders of the Roanoke and New River Valleys to create a strategic plan for the future of the area consisting of Giles, Pulaski, Montgomery, Craig, Floyd, Franklin, Botetourt and Roanoke Counties and the cities of Radford, Salem and Roanoke. The 1,000-member Council is divided into 33 teams working on specific subjects and is governed by a steering committee composed of representatives of each chamber of commerce in the area, the New River Valley Alliance, the Economic Development Partnership of the Roanoke Valley, and the Roanoke Valley Business Council. The Council's mission is to "build a vision for the New River Valley and the Roanoke Valley which is comprehensive and detailed, shared, understood, and which reflects general commitment throughout the region."

In the fall of 1993, the Council held five meetings to develop The New Century Vision. "a verbal picture of the future New Century Region [that] includes concise statements of vision and strategies for seven key areas: education, quality of life, health and safety, infrastructure, economy, governance and leadership." In the summer of 1995, the Council released three reports containing its recommendations for the region: one on economic development, one on preserving the region's scenic beauty by protecting it from development, and one addressing education.

B. A STRATEGIC PLAN FOR VIRGINIA

1. Common Elements of Sustainable Development Projects

Presumably, one of the reasons the task force was directed by HJR 291 to examine existing sustainability initiatives was to enable it to identify effective strategies to incorporate into its own strategic plan. Many of the sustainable development projects studied by the task force share comparable methods and seek to accomplish similar goals. Appendix F is a chart which summarizes the elements utilized by each of the sustainable development projects examined by the task force.

One example of an element that is common to many sustainability efforts is the initial task of creating a list of sustainability goals, principles or values or a guiding definition of the term "sustainable development." As discussed previously, the concept of sustainable development can mean different things to different people. Consequently, agreeing upon an understanding of the notion of sustainable development can be essential first step in the planning process.

Another common element of sustainability projects is the involvement of a large number of stakeholders. This element reflects both the substance and process of sustainable

development; that is, not only *how* sustainable development is done (usually by a committee representing a broad range of interests and often involving public hearings or another method of public input), but also *what* sustainable development seeks to accomplish (a future that is fair to all, including marginalized groups). Use of a consensus-building process is another element that is both procedural and substantive in nature. First, the involvement of a diverse group of people may require the use of techniques that will facilitate consensus-building. The Roundtable Informational Forum is a good example of such a process. Second, sustainable development seeks to produce a vision of the future that has been agreed upon by the community, or in the words of the New Century Council, is “shared, understood, and which reflects general commitment throughout the region.”

Identification of barriers to sustainable development is also a commonly used tool. Once a shared vision of a desirable future is established, it is helpful to identify existing policies or practices that move development in an “unsustainable” direction. The Blueprint for Sustainable Development of Virginia, for example, identifies three impediments to achieving sustainability: lack of a commitment to sustainable development, institutional fragmentation, and uncoordinated planning at both state and local levels. Sustainable development plans also tend to be based on a long-term vision. The New Century Council, for example, set goals to be accomplished over a twenty-year period. A long-term focus is also apparent in the most quoted definition of sustainable development: development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.

Commonly identified goals of sustainable development initiatives include increasing the information collection and accessibility capabilities of government and the private sector (through the use of geographic information system technology, for example), minimization of waste, pollution prevention, growth management, and achieving better coordination among different government agencies, different levels of government, and the public and private sectors so as to prevent fragmented policy making. As discussed previously, most sustainable development work emphasizes the interrelatedness of environmental and economic concerns.

2. Issues

After consideration of the elements that are common to other sustainable development projects, members of the task force identified issues which should be addressed by Virginia’s strategic plan. Issues raised included:

- What is the appropriate role of the state in encouraging sustainable development at the local level?
- How might a desirable relationship between local and state regulators and policies concerning issues of greater than local significance be achieved?
- How might stakeholders be included in the strategic planning process?
- How broadly or narrowly should sustainable development be defined so that a manageable plan might be created? How broad or narrow should the identified goals of the plan be?

- How might existing regional entities be utilized to implement sustainable development goals?
- How might voluntary sustainable development be encouraged?
- How might the Virginia Geographic Information Network be used to pursue sustainable development goals?

3. Recommendations for the Statewide Strategic Plan

Because several successful sustainable development projects already exist in Virginia, the task force decided to solicit the help of project leaders in addressing some of the issues raised above. Task force members especially wanted to know how a statewide strategic plan might encourage and benefit such local and regional projects in the future. Recommendations were received from representatives of four regional initiatives: the Northampton County Sustainable Development Initiative, the Rappahannock River Valley Project, the Thomas Jefferson Sustainability Council, and the Clinch Powell Sustainable Development Forum. L. Gregory Low, Vice President of The Nature Conservancy, also made recommendations to the task force. The speakers' written recommendations appear as Appendices G-K.

The project leaders' presentations addressed both general goals for sustainable development in Virginia and specific ideas for programs that might be implemented by state government to encourage sustainable development at the local and regional level. Speakers listed many examples of activities that the Commonwealth should encourage, including:

- economic development that is specifically and uniquely designed and developed by the local community
- economic development that both develops and protects natural resources which support the local economy
- business incubators, flexible manufacturing networks, microenterprise programs, and job training
- "Buy Virginia" and "Buy Local" campaigns
- supplier-manufacturing networks which link manufacturers with potential local suppliers
- REAL (Real Entrepreneurship through Action Learning) and other efforts to train innovative and skilled youth entrepreneurs
- small business in general, particularly agricultural, forest products and tourism businesses
- use by businesses of waste and recycled products and renewable energy sources
- the development of geographic information systems
- stormwater management
- revenue-sharing and interjurisdictional cooperation among local governments

Common recommendations for specific programs were that a grant program for demonstration projects should be established and that staff should exist, located either in a state agency or in planning district commissions, that could provide technical assistance to local projects. Representatives of two groups recommended that the Virginia Department of Transportation be directed to revise its road construction standards, particularly wide road width requirements which are inconsistent with rural and cluster development patterns. Other recommendations included:

- Facilitate permit processing for environmentally sound development.
- Strengthen the "Virginia's Finest" program.
- Establish a comprehensive agricultural preservation program.
- Create a state designation for localities that are committed to sustainability.
- Produce a detailed inventory showing the types, quantity and distribution of Virginia's natural resources.
- Develop criteria to assess compatibility and long-term benefits and costs of new industries, taking into account regional needs, priorities and policies.

The Nature Conservancy has assisted and implemented sustainable development programs in Virginia and other states. Mr. Low identified seven key success factors for successful local sustainable development programs. They are: (1) local citizen leadership, (2) community readiness, (3) a collaborative, broadly-based local process and institutional leadership, (4) a strategic planning approach, (5) the use of outside expertise and support, (6) adequate funding, and (7) successful action with tangible results. Based on these factors, Mr. Low recommended the following working definition of sustainable development: "economic development and natural resource uses that enhance the local economy, achieve community goals and protect the environment." He encouraged the task force to create a test program that would provide civic leaders with sustainable development training and assistance, and would provide financial support to a small number of communities, selected through a competitive process, for the development and implementation of comprehensive sustainable development programs which would include business planning for job creation. Mr. Low said that such programs should be developed and implemented by proven outside providers, under the auspices of appropriate state agencies.

4. Choosing a Definition, Goals

At its final meeting, the task force discussed several options for adopting a definition of sustainable development that could serve as the starting point for a strategic plan. The following definitions were discussed:

Minnesota HF No. 1527: development that maintains or enhances economic opportunity and community well-being while protecting and restoring the natural environment upon which

quality of life depends. Sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs. It is long-term conservation of the capacity to meet needs.

Gregory L. Low: economic development and natural resource uses that enhance the local economy, achieve community goals and protect the environment.

Bruntland Commission: development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.

HJR 653 (1993): a process of dynamic change in which the allocation of resources, the direction of investments, the orientation of technological development, the substance of public education, the mechanisms for public and private decision making, and the structure of laws and institutions are made consistent with meeting the present needs of all citizens as well as those of future generations.

HJR 291 (1994): economic development which protects environmental resources and which is characterized by local communities that are diverse, productive and adaptable.

The task force adopted the following definition of sustainable development: development that maintains or enhances economic opportunity and community well-being while protecting and restoring the natural environment upon which quality of life depends. Sustainable development meets the needs of the present without compromising the ability of future generations to pursue their own needs. It is long-term conservation of the capacity to meet needs.

The task force then reviewed possible goals that might be incorporated into a strategic plan, including:

- Education, training, technical support and a sustainable development database provided by the state.
- Sustainable development planning by localities.
- Coordination and support to local sustainable development efforts provided by planning district commissions.
- Creation of a sustainable development commission.
- Funding for and implementation of pilot projects.
- Encouragement of small business, entrepreneurship, and the tourism, agriculture, forestry, and telecommunications industries.
- Promotion of waste reduction.

- Establishment of the Virginia Geographic Information Network.
- Promotion of public/private partnerships.
- Increased flexibility in both laws and regulations, to encourage creativity and local solutions to problems.
- Management of growth and development.
- Strengthening of localities.
- Protection of historical and natural areas.
- Promotion of agriculture-based, locally driven sustainable development.

The following sustainable development goals were endorsed by the task force:

1. Sustainable development planning by localities.
2. Planning District Commissions may provide coordination and support to local sustainable development efforts.
3. Encouragement of sustainable businesses, entrepreneurship, and tourism.
4. Promotion of public/private cooperation.
5. Increased flexibility in both laws and regulations, to encourage creativity and local solutions to problems and to eliminate regulatory barriers to sustainable development.

IV. CONCLUSION

The issue of sustainable development is one that is complex and far-reaching. Involving not only ideas about economics, the environment and social goals, sustainable development is also concerned with the process of decisionmaking in both the public and private sectors. While the task force made no formal recommendations, the study provided a valuable opportunity to explore the many issues subsumed under the phrase "sustainable development" and to see how the proponents of sustainable development correlate these issues to forge a comprehensive approach to the pursuit of a community's goals. The task force wishes to thank all the interested parties who contributed toward its understanding of sustainable development in Virginia and elsewhere.

Most importantly, the task force learned a great deal about several of the very successful sustainable development projects already existing throughout the Commonwealth. It is these locally and regionally-based initiatives that will determine the future of sustainable development in Virginia. The task force commends their work and encourages them to continue to lead the way toward the kind of future that is desired by their communities.

Respectfully submitted,

Del. Clarence E. Phillips, *Chairman*
Del. David G. Brickley
Del. Shirley F. Cooper
Del. Richard L. Fisher
Del. W. Tayloe Murphy, Jr.
Del. Robert E. Nelms
Del. Edgar S. Robb
Sen. Robert L. Calhoun
Sen. Joseph V. Gartlan, Jr.
Sen. Elliot S. Schewel
Carol R. Foster
Robert "Bobby" M. Hall
W. Michael Peirson
Donnie W. Slusher
Hon. Robert Skunda
Hon. Becky Dunlop

The dissent of David A. Tice, in which David P. Bowerman concurs, follows.

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DAVID A. TICE, CF
President

VICKIE H. TICE
Vice President

28 May 1996

Ms. Nicole R. Beyer
Division of Legislative Services
General Assembly Building
910 Capitol Street, 2nd Floor
Richmond, Va. 23219

Dear Ms. Beyer:

Thank you for sending the draft final report of the Task Force Studying Sustainable Development. I have reviewed the draft report and offer the following comments.

HJR 291 (1994 session) and HJR 536 (1995 session) specifically charged the task force with three tasks:

- "assess current sustainable development initiatives in the Commonwealth and other areas";
- "develop a statewide strategic plan for sustainable development"; and
- "recommend appropriate actions which state and local governments, citizen groups, and nonprofit organizations, especially in rural areas of the Commonwealth, might consider for implementation."

The draft final report has generally fulfilled the first task. While the report omits several significant private initiatives relating to sustainable development in the commonwealth, staff has done a nice job in summarizing the various public programs of other states and providing materials relating to the major regional initiatives within the Commonwealth. It would have been helpful to have updated the information on the regional programs, since much of the material included in the report is now almost two years old, but I am satisfied that recipients of the report will be able to get a sense of the scope of related activities underway by citizens, local governments and businesses.

The report, however, falls considerably short of accomplishing tasks two and three. I have tried, without success, to interpret the report as meeting the definition of a "statewide strategic plan". I have also considered whether the Task Force's selection of five "sustainable development goals" (pages 29-30 of the report) could satisfy our charge to "recommend appropriate actions...", and conclude that there is a significant gap between the endorsement of these goals and the delineation of appropriate actions.

Ms. Nicole R. Beyer
28 May 1996
Page Two

Besides failing to accomplish these tasks, I feel we have missed a significant opportunity to encourage the kinds of programs that are bringing industry and citizens together in a way that advances both economic development and enhancement of the quality of life in the Commonwealth. I stand ready to continue to assist with such efforts. I cannot, however, approve of the proposed final report which fails to meet the tasks with which we were charged when we accepted the responsibility of serving on the Task Force.

Sincerely,

A handwritten signature in black ink, appearing to read "David A. Tice", written over a horizontal line.

David A. Tice CF
President

APPENDICES

APPENDIX A
GENERAL ASSEMBLY OF VIRGINIA -- 1994 SESSION

HOUSE JOINT RESOLUTION NO. 291

Establishing a sustainable development task force.

Agreed to by the House of Delegates, March 10, 1994

Agreed to by the Senate, March 8, 1994

WHEREAS, the Commonwealth of Virginia seeks both to promote economic development and to protect its environment and natural resources; and

WHEREAS, many areas of the Commonwealth, including rural areas, are facing serious economic hardship, including job losses, unemployment, poverty, migration of young people and other adverse socioeconomic conditions; and

WHEREAS, many of these same areas have significant environmental resources, including outstanding examples of ecosystems; significant habitats for plants and animals; pristine rivers, lakes and estuaries; prime farmlands; and excellent air quality; and

WHEREAS, Virginia's rich and diverse natural resources offer the potential for sustained contributions to economic vitality and quality of life for urban as well as rural residents; and

WHEREAS, studies have shown that small companies with fewer than 20 employees have created more than 60 percent of new employment in rural communities, that expansion of existing local firms has created the largest source of net employment, and that economic diversification is critical to the long-term economic and ecological health of rural communities; and

WHEREAS, the term "sustainable development" describes economic development which protects environmental resources and which is characterized by local communities that are diverse, productive and adaptable; and

WHEREAS, citizen-based sustainable development initiatives in the Commonwealth, including the work of the Northampton Economic Forum on Virginia's Eastern Shore, the Clinch-Powell Sustainable Development Forum in southwestern Virginia, and an emerging citizen initiative in the Lower Rappahannock Valley, and the Thomas Jefferson Planning District Sustainability Council in Piedmont have shown good promise for success; and

WHEREAS, the Commonwealth has laid a foundation to promote sustainable development through various studies and programs such as the Commission Studying Capital Financing Needs of Small Business in Virginia, which proposed recommendations to encourage locally based environmental health and economic development; a strategic plan for sustainable development proposed in House Joint Resolution No. 653 (1993); support for community-based sustainable development planning initiatives, including microenterprise development programs by the Center for Rural Development of the Department for Housing and Community Development; and developmental plans for sustainable business ventures by the Entrepreneurial Center of Old Dominion University in conjunction with The Nature Conservancy; and

WHEREAS, private foundations have indicated willingness to support statewide planning initiatives for sustainable development; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That a task force be established to study sustainable development. The task force shall be composed of eighteen members to be appointed as follows: six members of the House of Delegates to be appointed by the Speaker of the House; four members of the Senate to be appointed by the Senate Committee on Privileges and Elections; and six citizens to be appointed by the Governor, who shall be representatives of local government, community-based organizations, the Virginia Eastern Shore, far southwestern Virginia, Piedmont Virginia, and nonprofit economic development and environmental conservation organizations. The Secretaries of Commerce and Trade and Natural Resources shall serve as nonvoting ex officio members. The task force shall assess current sustainable development initiatives in the Commonwealth and other areas, develop a statewide strategic plan for sustainable development, and recommend appropriate actions which state and local governments, citizen groups, and nonprofit organizations, especially in rural areas of the Commonwealth, might consider for implementation.

The Division of Legislative Services shall provide staff support for the study. Technical assistance shall be provided by the Department of Housing and Community Development.

The direct costs of this study shall not exceed \$ 10,500.

The task force shall complete its work in time to submit its findings and recommendations to the Governor and the 1995 General Assembly as provided in the

procedures of the Division of Legislative Automated Systems for the processing of legislative documents.

Implementation of this resolution is subject to subsequent approval and certification by the Joint Rules Committee. The Committee may withhold expenditures or delay the period for the conduct of the study.

**APPENDIX B
1995 SESSION
ENGROSSED**

LD3193136

**HOUSE JOINT RESOLUTION NO. 536
House Amendments in [] — February 4, 1995**

Continuing the sustainable development task force.

Patrons—Phillips and Brickley

Referred to Committee on Rules

WHEREAS, the 1994 Session of the General Assembly authorized the establishment of the task force on sustainable development pursuant to House Joint Resolution 291; and

WHEREAS, the task force was directed to study sustainable development; and specifically to (i) assess current sustainable development initiatives in the Commonwealth and other areas, (ii) develop a statewide strategic plan for sustainable development, and (iii) recommend appropriate actions which state and local governments, citizen groups, and nonprofit organizations, especially in rural areas of the Commonwealth, might consider for implementation; and

WHEREAS, due to the large quantity and complexity of the issues involved, the task force has agreed that another year of study is necessary; now, therefore, be it

RESOLVED by the House of Delegates, the Senate of Virginia concurring, That the task force on sustainable development, as established by HJR No. 291 (1994), be hereby continued. The charge of the task force shall continue as set forth in HJR No. 291 (1994).

The membership of the task force shall continue as established by HJR No. 291 (1994). Vacancies shall be filled in the same manner as the original appointments.

Staffing for the task force shall be provided by the Division of Legislative Services. The Department of Housing and Community Development and all other agencies and institutions of the Commonwealth shall make available to the task force all information, and shall provide any assistance, which shall be necessary for the completion of this study.

The direct costs of this study shall not exceed \$8,400.

The task force shall [~~complete its work in time to submit its~~ be continued for one year only and shall submit its final] findings and recommendations to the Governor and the 1996 Session of the General Assembly as provided in the procedures of the Division of Legislative Automated Systems for the processing of legislative documents.

Implementation of this resolution is subject to subsequent approval and certification by the Joint Rules Committee. The Committee may withhold expenditures or delay the period for the conduct of the study.

Official Use By Clerks

Passed By

The House of Delegates

without amendment
with amendment
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Passed By The Senate

without amendment
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Date: _____

Date: _____

Clerk of the House of Delegates

Clerk of the Senate

LD3193136

HJ336E

PRINCIPLES OF SUSTAINABLE DEVELOPMENT:

1. We must preserve and, where possible, restore the integrity of natural systems — soils, water, air, and biological diversity — which sustain both economic prosperity and life itself.
2. Economic growth, environmental protection, and social equity should be interdependent, mutually reinforcing national goals, and policies to achieve these should be integrated.
3. Along with appropriate protective measures, market strategies should be used to harness private energies and capital to protect and improve the environment.
4. Population must be stabilized at a level consistent with the capacity of the earth to support its inhabitants.
5. Protection of natural systems requires changed patterns of consumption consistent with a steady improvement in the efficiency with which society uses natural resources.
6. Progress toward the elimination of poverty is essential for economic progress, equity, and environmental quality.
7. All segments of society should equitably share environmental benefits and burdens.
8. All economic and environmental decision-making should consider the well-being of future generations, and preserve for them the widest possible range of choices.
9. Where public health may be adversely affected, or environmental damage may be serious or irreversible, prudent action is required even in the face of scientific uncertainty.
10. Sustainable development requires fundamental changes in the conduct of government, private institutions, and individuals.
11. Environmental and economic concerns are central to our national and global security.
12. Sustainable development is best attained in a society in which free institutions flourish.

13. Decisions affecting sustainable development should be open and permit informed participation by affected and interested parties, that requires a knowledgeable public, a free flow of information, and fair and equitable opportunities for review and redress.
 14. Advances in science and technology are beneficial, increasing both our understanding and range of choices about how man and the environment relate. We must seek constant improvements in both science and technology in order to achieve eco-efficiency, protect and restore natural systems and change consumption patterns.
 15. Sustainability in the United States is closely tied to global sustainability. Our policies for trade, economic development, aid, and environmental protection must be considered in the context of the international implications of these policies.
-

APPENDIX D
1993 SESSION
ENGROSSED

HP7574136

HOUSE JOINT RESOLUTION NO. 653

House Amendments in [] - February 7, 1993

Encouraging the Governor, state and local officials, and the leaders of educational institutions and civic organizations to work together to prepare a Virginia strategy for sustainable development.

Patron—Brickley

Referred to the Committee on Rules

WHEREAS, the leadership of the distinguished citizens of the Commonwealth of Virginia—historically recognized as The Mother of Presidents—has been intrinsic to the founding, development, well-being, and prosperity of the United States of America; and

WHEREAS, the United States of America has voluntarily accepted the goal of achieving sustainable development, and the need to prepare a U.S. National Strategy for Sustainable Development, by joining in the international consensus to ratify Agenda 21, the primary, long-term action plan stemming from the United Nations Conference on Environment and Development, held in Rio de Janeiro in June 1992; and

WHEREAS, sustainable development is defined as a process of dynamic change in which the allocation of resources, the direction of investments, the orientation of technological development, the substance of public education, the mechanisms for public and private decision making, and the structure of laws and institutions are made consistent with meeting the present needs of all citizens as well as those of future generations; and

WHEREAS, the concept of sustainable development combines a consideration and understanding of the need for continuing economic and social progress with a sensitivity to human reliance on protecting, restoring, and maintaining environmental quality and productive natural systems; and

WHEREAS, any successful plan for the achievement of sustainable development must proceed from the direct involvement and participation of, and a recognition of the legitimate needs and aspirations of, all citizens, especially those with the greatest stake in a sustainable future: the youth of our nation; and

WHEREAS, the Global Tomorrow Coalition is a nonprofit alliance of approximately 100 organizations, institutions, and corporations focused on the goal of sustainable development and dedicated to building stronger leadership in the United States to resolve long-term environmental and socio-economic problems by promoting broad-based partnerships and responsible public policies; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That the Governor, state and local officials, and the leaders of educational institutions and civic organizations be encouraged to work together to prepare a Virginia strategy for sustainable development, to serve as a national model for widespread emulation; and, be it

RESOLVED FURTHER, That leaders in business, trade unions, educational institutions, youth groups, engineering, science and technology, faith communities, Native American organizations, philanthropy, and supportive civic organizations such as the Global Tomorrow Coalition, be urged to participate in this endeavor, which is manifestly in keeping with Virginia's acknowledged role as a national leader in philosophy and action for effective governance, enhancement of individual liberty and well being, promotion of economic productivity, prudent management of natural resources, and encouragement of youth leadership; and, be it

RESOLVED FINALLY, That the Clerk of the House of Delegates prepare a copy of this resolution for presentation to the Governor [of the Commonwealth, the elected leaders of the political subdivisions of the Commonwealth, the head of each of the agencies of the Commonwealth, the presidents of the educational institutions of the Commonwealth, and the leader of the Global Tomorrow Coalition], that the Secretary of Education be requested to send a copy of this resolution to the presidents of the public institutions of higher

1 higher education and the chairman of the Global Tomorrow Coalition and that the Virgini
2 Municipal League and the Virginia Association of Counties be requested to send a copy c
3 this resolution to the city and town councils and the county boards of supervisors,
4 respectively,] in order that they may be apprised of the sense of the General Assembly.

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Clerk of the House of Delegates	Clerk of the Senate

APPENDIX E

Northampton County, Virginia

Sustainable Development Initiative

capitalizing on and protecting Northampton's world-class natural, cultural, historic, and human assets for the ongoing benefit of all citizens.

Progress Report - September 1995

The following six *target industries* and the *vital assets* on which these industries depend, are the focus of Northampton's integrated economic development/asset protection program, the *Northampton County Sustainable Development Action Strategy*. Implementation is a public/private venture relying on many groups and individuals. Recent sustainable development progress in Northampton County is highlighted below.

Develop Agriculture Industry/Protect Productive Land

- ◆ *Eastern Shore Farmer's Market* established and in business for wholesale produce.
- ◆ *Virginia Eastern Shore Corporation* opened, marketing organic and low-input farm produce.
- ◆ Business planning underway for niche-market, food-processing company that will add value to and create jobs from locally-grown farm and seafood produce.
- ◆ Zoning ordinance/map drafted to preserve County's traditional rural settlement pattern of compact villages and towns surrounded by productive land.
- ◆ Village of Willis Wharf creates a strategic plan to preserve its identity and character.

Develop Seafood & Aquaculture Industry/Protect Water Quality

- ◆ Aquaculture industry expanded from one company in 1991 to four in 1995. Expanded from less than \$1 million sales in 1991 to \$4 Million in 1995. Projected at \$11 Million sales in 1997. Expanded from less than 10 million clams sold in 1991 to 25 million clams in 1995. Production and market on line for sales of 70 million clams in 1997.
- ◆ Aquaculture employment increased from less than 10 full-time/year-round employees in 1991 to 87 full-time/year-round employees in 1995. Part-time/seasonal employment increased from less than 10 in 1991 to 75 in 1995.
- ◆ New clam hatchery/nursery opened in village of Willis Wharf, \$400,000 investment.
- ◆ New zoning ordinance drafted, designed to minimize runoff, preserve vegetation, cluster development to protect water quality.
- ◆ Local water quality protection strategy being developed to protect seafood/aquaculture investment/jobs.

Develop Heritage Tourism Industry/Protect Natural & Cultural Assets

- ◆ *Northampton County Heritage Trail* tour and interpretive program under development, funded by \$740,000 Department of Transportation grant (ISTEA).
- ◆ *The Eastville Inn*, colonial era tavern, being restored as a *Heritage Trail* visitor center.
- ◆ *Nassawadox Steam-Powered Sawmill* being restored as a *Heritage Trail* museum.

- ◆ Survey and preservation strategy for County's *Historic Settlements, Villages, Towns* funded by \$20,000 Department of Historic Resources grant/\$20,000 ISTEA funds.
- ◆ First & Second Annual *Eastern Shore Birding Festivals* attracts 1,000 people from off the shore. Visitor spending increases from \$52,000/weekend during first Festival to \$112,000/weekend during second Festival. *Third Annual Eastern Shore Birding Festival* to be held October 6-8, 1995.

Develop Arts, Crafts, Local Products Industry/Preserve Culturally-Diverse and Authentic Community

- ◆ Annual *Heritage Festival* established, celebrates ethnic and cultural diversity of County's people.
- ◆ Business planning underway for cooperative production and wholesale/retail marketing of locally-unique art/craft products.

Develop Research, Education Industry/Protect Natural and Cultural Systems

- ◆ *Eastern Shore Institute* formed by Old Dominion University and The Nature Conservancy.
- ◆ Retreat/Conference center planned with *Sustainable Technologies Industrial Park*.
- ◆ County *Geographic Information System* under development by University of Virginia.

Develop New Industry/Protect Sense of place, Quality of Life, and Groundwater

- ◆ *Port of Cape Charles Sustainable Technologies Industrial Park* being developed to model the most advanced design, facilities, industrial processes in resource efficiency, pollution prevention.
- ◆ *Port of Cape Charles Sustainable Technologies Industrial Park* Chosen as national demonstration project of President's Council on Sustainable Development.
- ◆ International photovoltaic products manufacturer committed as first corporate anchor of the *Sustainable Technologies Park*.
- ◆ University of Virginia Architecture Dean leads international design team in *Community Design Charette* for *Sustainable Technologies Industrial Park*. Park Master Plan created by private/public, local/state/federal partnership.
- ◆ US Department of Commerce, National Oceanic & Atmospheric Administration committed as *Sustainable Technologies Park* development partner, provides \$74,000 in grants for planning, community involvement, design.
- ◆ US Environmental Protection Agency committed as *Sustainable Technologies Park* development partner, selects *Port of Cape Charles* as economic redevelopment pilot project, awards \$200,000 grant.
- ◆ \$1,067,000 local/state/federal funding package created for phase-one infrastructure construction for *Sustainable Technologies Park* development.
- ◆ Business planning underway for niche-market, food-processing company.

Special Achievements by the Community

- ◆ Northampton County awarded \$700,000 *Special Area Management Plan* grant from the US Department of Commerce, National Oceanic & Atmospheric Administration, through Virginia Coastal Resources Management Program.
- ◆ Northampton County creates, adopts, implements America's first *Sustainable Development Action Strategy*.
- ◆ Northampton County *Sustainable Development Action Strategy* earns *Presidential Leadership Award* from the National Association of Counties
- ◆ County Administrator, Thomas E. Harris, appointed to the *National Association of Counties Sustainable Development Task Force*
- ◆ Sustainable Development Task Force Chairman and Cherrystone Aquafarms CEO, Dr. Michael Peirson, appointed by Governor to *Virginia Sustainable Development Task Force*.
- ◆ Community beautification program, Northampton Alliance Against Trash, receives state and national honors from *Keep Virginia Beautiful* and *America the Beautiful* programs.
- ◆ *International Countryside Stewardship Exchange* Team hosted with representatives from U.S., Canada, England, Scotland and Wales, valuable recommendations being implemented.
- ◆ Northampton Social Services receives Virginia League of Social Services *Outstanding Group Award* to for *World Changers* project.

COMMON ELEMENTS OF SUSTAINABLE DEVELOPMENT PROJECTS

	Guiding definition or list of principles, goals or values	Long-term focus	Multistakeholder involvement, social equity focus	Consensus building, dispute resolution	Monitoring progress, use of indicators	Identification of barriers to sustainable development	Information collection and accessibility	Public/private or intergovernmental sector coordination	Waste minimization, pollution prevention	Growth management	Interrelatedness of economy and environment
1. Minnesota Sustainable Development Initiative (MN Environmental Quality Board, 105 business and environmental leaders appointed by the Governor)	✓	✓	✓	✓	✓	✓	✓	✓			✓
2. Sustainable North Carolina Project (Environmental Resource Program, Univ. of North Carolina)	✓		✓		✓						✓
3. Kentucky Sustainable Practices Initiative (governor and cabinet secretaries, legislature)	✓	✓	✓	✓	✓						✓
4. Washington: Environment 2010 Project (steering committee = agency heads and federal agency representatives)	✓	✓	✓	✓			✓	✓			
5. New York and the Tri-State Area Sustainable Development Initiative (Columbia Univ. SUNY)	✓	✓	✓	✓							✓
6. Colorado Sustainability Project (Corporate Alliance for Better Air, CO Dept. of Health and Environment)	✓	✓	✓	✓	✓						✓

APPENDIX F

	Guiding definition or list of principles, goals or values	Long-term focus	Multistakeholder involvement, social equity focus	Consensus building, dispute resolution	Monitoring progress, use of indicators	Identification of barriers to sustainable development	Information collection and accessibility	Public/private or intergovernmental sector coordination	Waste minimization, pollution prevention	Growth management	Interrelatedness of economy and environment
7. Oregon Benchmarks (legislature, OR Progress Board, governor)	✓	✓	✓		✓		✓	✓		✓	
8. Sustainable Maine (citizens, state legislators, representatives of state agencies, business groups, universities and nonprofit groups)			✓	✓							✓
9. Montana Consensus Council (created by executive order)			✓	✓							✓
10. Governor's Commission for a Sustainable South Florida (agency, legislative, business, local government, tribal and public interest representatives)		✓	✓	✓	✓						✓
11. Blueprint for Sustainable Development of Virginia (Environmental Law Institute)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
12. Draft Policy for Public Comment: to Ensure the Nation's Future (U.S. Department of Commerce)			✓				✓	✓	✓		✓
13. President's Council on Sustainable Development (appointed by Clinton Administration)	✓	✓	✓			✓				✓	✓

	Guiding definition or list of principles, goals or values	Long-term focus	Multistakeholder involvement, social equity focus	Consensus building, dispute resolution	Monitoring progress, use of indicators	Identification of barriers to sustainable development	Information collection and accessibility	Public/private or intergovernmental sector coordination	Waste minimization, pollution prevention	Growth management	Interrelatedness of economy and environment
14. Canada: <i>Projet de société</i> (partnership of government, indigenous, business and voluntary organizations); The National Roundtable on the Environment and the Economy (mandated by Parliament, reports to the Prime Minister); Territorial and Provincial Round Tables	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
15. New Century Council (steering committee = representatives from each chamber of commerce in the New River and Roanoke Valleys + the New River Valley Alliance, the Economic Development Partnership of the Roanoke Valley, and the Roanoke Valley Business Council)	✓	✓	✓							✓	✓
16. Eastern Shore: Northampton County Sustainable Development Task Force (appointed by the Bd. of Supervisors); Virginia Coast Institute (non-profit org. founded by ODU and The Nature Conservancy)	✓	✓	✓	✓	✓	✓		✓	✓		✓

	Guiding definition or list of principles, goals or values	Long-term focus	Multistakeholder involvement, social equity focus	Consensus building, dispute resolution	Monitoring progress, use of indicators	Identification of barriers to sustainable development	Information collection and accessibility	Public/private or intergovernmental sector coordination	Waste minimization, pollution prevention	Growth management	Interrelatedness of economy and environment
17. Clinch Powell Sustainable Development Forum (consortium of community organizations, small businesses and public agencies in Northeast Tennessee and Southwest Virginia)	✓	✓	✓				✓	✓	✓		
18. Rappahannock Initiative Committee (citizen committee staffed by the Chesapeake Bay Foundation)	✓	✓	✓				✓	✓	✓	✓	✓
19. The Thomas Jefferson Sustainability Council (appointed by the Thomas Jefferson Planning District Commission)	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
20. Global Tomorrow Coalition (coalition of mostly public interest groups)		✓	✓	✓	✓			✓	✓	✓	✓
21. Guidelines for State Level Sustainable Development, Sustainability Round Table, Informational Forum (consultants Patricia Scruggs and Linda Starke)	✓	✓	✓	✓	✓	✓	✓	✓			

APPENDIX G

Thomas Jefferson Planning District Commission

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Charlottesville, VA 22902-1505

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August 21, 1995

Suggested Objectives for the Task Force Studying Sustainable Development

from the Thomas Jefferson Sustainability Council

"The Mission of the Council is to provide information to citizens throughout the region to meet the needs of the present without compromising the ability of future generations to meet their own needs."

The Sustainable Development Task Force should study and provide recommendations for legislative actions that will do the following:

1. Support the creation and use of uniform, understandable, analytic tools to measure the long-term effects of policies and decisions, especially on the economy and the environment.
2. To guide Virginia's industrial recruitment efforts, develop criteria to assess compatibility and long-term benefits and costs of new industries, taking into account the needs and priorities of different regions.
3. Target industries to areas where they support local land use and other public policies.
4. Support small, diversified farms to thrive in the Commonwealth. (Such farms link the production of renewable resources with local consumption.)
5. Encourage the growth of businesses that process and produce locally harvested wood products.
6. Encourage the growth of job opportunities that provide a livable wage and are fulfilling.
7. To facilitate the development and growth of small business, simplify governmental procedures and regulations.
8. Make it possible for every resident of the Commonwealth to obtain comprehensive medical care, including mental, dental, and preventive care, with an emphasis on long-term health maintenance.

City of Charlottesville

Key Slaughter
David Toecano

Albemarle County

Sally Thomas, Chair
Walter Perkins

Fluvanna County

Jerome J. Booker
Ernest W. Morris

Greene County

Lee S. Estes
Stanley M. Powell

Louisa County

H.E. Hottinger
John J. Purcell, Jr.

Nelson County

Ray Dunn, Vice-Chair
Hughes C. Swain

9. To allow development at a human scale, not solely geared to fast automobile traffic, increase the flexibility of building codes, zoning ordinances, and other land development regulations
10. Encourage local governments to work together on inter-jurisdictional issues.
11. Share revenue between localities as a means of compensating for imbalances in the distribution of economic activity.
12. Encourage the use of renewable energy resources in the Commonwealth.
13. Provide energy conservation incentives.
14. Encourage businesses to use waste and recycled products.
15. Encourage the use of rail transportation for cargo and passengers.
16. Use new environmental technologies to reduce pollution and encourage zero-emission zones.
17. Promote the management of storm-water runoff to mimic in quality and quantity natural hydrological cycles.
18. Produce a detailed inventory of the natural resources of the Commonwealth to show the types, quantity, and distribution of these resources.
19. Empower citizens with legal standing to bring suit on environmental issues.
20. Strengthen the Virginia's Finest program.

APPENDIX H

General Assembly's Task Force on
Sustainable Development Committee Meeting - August 21, 1995
Presentation by staff from the Chesapeake Bay Foundation
and the Rappahannock River Resource Council

The Rappahannock River project is a sustainable development initiative that is a cooperative effort between the Chesapeake Bay Foundation and the Rappahannock River Resource Council, a private citizens organization.

In considering the request for recommendations on how this Task Force can assist groups involved in the promotion and attainment of sustainable development, we have developed the following recommendations for your consideration.

1. Develop A Grant Program For Sustainable Development Programs -

As in many cases, when a General Assembly Committee or state agency asks how it can assist or implement a program, the first item that is mentioned is funding. We realize that there are fiscal constraints on state agencies and programs but we still feel that a grant program to support sustainable development initiatives would be a wise use of funds and that a small investment could have large benefits for the citizens of Virginia.

The Chesapeake Bay Local Assistance Board administers a grant program to local governments to assist them in the implementation of the Chesapeake Bay Preservation Act. While the grants in this program have not been historically large, they have assisted local governments throughout Tidewater Virginia in protecting water quality and implementing the CBPA. The grants have provided many items which the governments never could have afforded on their own, such as professional planning staff, and mapping and computer capabilities.

We recommend that this task force study the possibility of establishing a grant program to assist groups and agencies with sustainable development projects. The grant program could require the use of matching funds which would help to leverage state funds and make the grant program more effective. An example of a project that could be funded through such a grant program would be the RRRRC oyster aquaculture program where seed money could be supplied for the establishment of an oyster aquaculture co-op.

2. Support The Establishment of A Comprehensive Agricultural Preservation Program In Virginia -

In order to promote and initiate sustainable development in Virginia, we must first promote and protect the land uses that make a region sustainable. Forestry and agriculture are still key components of Virginia's economy and are also key elements of

sustainability. We must develop programs and initiatives to protect these industries. We believe that agricultural preservation is an important issue and a critical need. Virginia is currently limited to two farmland preservation programs - agricultural and forestal districts and use-value taxation. Both of these programs are flawed, and do not offer true deterrents to the conversion of agricultural land. The limited roll-back penalty is not a deterrent to land conversion and probably encourages speculators.

A comprehensive package is needed which should include true financial incentives for agricultural preservation. Such a program should have guidelines for land that is to be considered for protection, such as targeting prime productive agricultural land and farmland under pressure from encroaching development. Many states throughout the nation have developed this type of program and have used various techniques to create financial incentives for preservation.

Some of the most popular and successful preservation programs include the following:

a). A transfer tax that is applied when land is sold and transferred from agricultural use. This can discourage land speculation and the funds can be used to support agricultural preservation programs.

b). The purchase of development rights on agricultural land. Through this type of program, the development rights are purchased by a state or local government and the land is then permanently limited to agricultural use. The resulting easement on the land applies to all subsequent land owners.

c). Incentives for conservation easements on agricultural land. Conservation easements are a particularly effective method of preserving land as they protect land while providing the easement donor with federal tax benefits. A state program designed to offer local property tax benefits for easements on agricultural land would be a great incentive and would help guarantee that a significant amount of farmland would be preserved for Virginia's future use. While total exemption from local property taxes is certainly out of the question, a specified time frame for a local property tax credit would offer the desired conservation incentive.

3. Create A State Designation for Localities That Are Committed To Sustainability.

To attract and promote sustainable development in Virginia, we must attract business and industry that operates on a sustainable basis. This can include businesses that rely on a natural resource for their product such as fisheries for seafood processing, or it can be an industry that operates in a sustainable manner by reclaiming, recapturing, and recycling their waste products. Zones should be established that should offer start-up cost packages for

new business locations and tax incentives for older industries which change their operations to make them sustainable within their communities.

It would be necessary to develop guidelines for measuring sustainability in order to create the zones, certify the locality as such, and select businesses to receive the benefits. In addition, a qualification should be that all zones must draft and implement a sustainable development plan for their region. These sustainable development zones would foster cooperation as localities would have to work together on a regional basis to create the sustainable development plans in order to receive the state benefits to attract the economic development.

4. Request The Virginia Department of Transportation (VDOT) To Review And Change Their Standards For Road Construction To Allow Greater Flexibility In Subdivision Design.

In promoting and encouraging sustainable development in the lower Rappahannock River region the RRRC worked with a team of designers to create two sets of site plans which demonstrate open space development (also referred to as cluster design) on waterfront farms in the Northern Neck and Middle Peninsula. This type of site design is sustainable as it allows for residential home development while preserving the natural resources and agricultural land on a development site. This type of residential design relies on the natural topography and resources on the land as the residential units are placed where the land is most suited to accommodate them.

Currently, VDOT standards require large road widths in residential subdivisions which consume a great amount of land and require a large amount of impervious surface. In other parts of the country, open space design ordinances and regulations provide for narrower roads to minimize land disturbance. This results in reduced costs to the developer, also. VDOT requirements make it extremely difficult for developers to utilize open space design due to the road width requirements. We recommend that this committee request a review of VDOT subdivision road standards and then make the necessary changes to allow for greater flexibility in road and site design.

4. Support Various Other State Initiatives That Assist Sustainable Development Efforts.

We recommend that this committee lend their support and assistance to other state initiatives that can foster sustainable development.

a). Lend support to the development of a statewide Geographic Information System (GIS), in order to provide technically accurate maps of our natural resources throughout Virginia.

b). Support the efforts of the 14 regional economic development councils that were established under Governor Allen's initiative - "Opportunity Virginia".

APPENDIX I

CLINCH POWELL SUSTAINABLE DEVELOPMENT INITIATIVE

Recommendations to Virginia Sustainable Development Commission August 21, 1995

Sustainable development has two central elements: sustainable communities, including cultural pride, entrepreneurial capacity and diverse local businesses, vibrant civic relationships, and hope for the future; and a sustainable ecosystem, including efficient resource and energy use, increased reliance on local renewable resources, waste and pollution minimization. To achieve these two elements, we recommend the following goals for the Commonwealth:

1. Support for diversified, innovative and value adding local businesses.

- * Encourage training for staff from Cooperative Extension, Dept. of Economic Development, SBDCs, PDCs and other segments of the business support community in sustainable development, flexible networking, microenterprise and product innovation.
- * Support non profits in organizing and facilitating flexible manufacturing networks in conjunction with business incubators, microenterprise programs, and job training.
- * Encourage or mandate reallocation of a portion of State and regional funds from industrial recruitment to small business loans and funding for sustainable development infrastructure, such as incubators, "waste exchange" projects, development of advanced manufacturing facilities for natural resources.
- * Create and help capitalize (with private lenders) a targeted capital access program for small business adopting or pioneering sustainable development or resource/pollution saving technologies and systems.

2. Provide technical assistance and incentives for waste minimization, recycling, remanufacturing, and substitution of renewables and non toxics in both manufacturing processes and material procurement.

- * Support on site technical assistance to manufacturers and natural resource based entrepreneurs in waste reduction, resource conservation and "lifecycle manufacturing" through the Center for Innovative Technology, the Southwest Virginia Center for Advanced Manufacturing Technology, and other technical assistance providers.
- * Reinstate Renewable Energy Tax credit and expand to include credit for use or adoption of any resource conserving/pollution minimizing technologies and systems.
- * Support creation of "waste exchange" systems and similar databases linking firms with waste or by product problems to innovators using recycled materials in their products.
- * Help fund and evaluate ten demonstration projects in sustainable forestry, agriculture, fisheries and tourism in different areas of the Commonwealth.
- * Reinstate funding for innovation grants and technical support staff at the Center On Rural Development/ which has been an essential catalyst in Virginia's sustainable development efforts.

3. Support development of higher value markets for local and Virginia based goods and services.

- * Create supplier-manufacturing networks such as the Oregon Marketplace which link manufacturers with potential local suppliers.
- * Promote "Buy Virginia" and "Buy Local" campaigns, including education and promotional efforts to consumers and experiments with local currency efforts such as Ithaca Dollars.
- * Assist farmers, fisherman, and wood manufacturers in gaining access to higher value local markets through creation of local marketing systems and incentives for local procurement.

4. Increase support for entrepreneurship and sustainable development infrastructure.

- * Support REAL (Rural Entrepreneurship through Action Learning) and other efforts to create innovative and skilled youth entrepreneurs, shifting the focus of vocational training from preparing "good employees" to cultivating good entrepreneurs. Provide assistance to schools in starting REAL or similar hands-on training programs.
- * Encourage PDCs and localities to utilize existing resources, including shell buildings, revolving loan funds, training programs, etc, to develop and support "entrepreneurship centers" which provide facilities, equipment, training, capital and market development assistance for sustainable entrepreneurs.

APPENDIX J

SUMMARY PRESENTATION TO VIRGINIA SUSTAINABLE DEVELOPMENT TASK FORCE

Monday, August 21, 1995

Mr. Chairman and Task Force Members:

I would like to take this opportunity to thank you on behalf of the Northampton County Board of Supervisors for allowing us to present Northampton County's Sustainable Development efforts to date, as well as areas that we believe the Commonwealth of Virginia could assist us and other communities within the State who see Sustainability as an important component of their future economic development.

I realize that our presentation up to this point has focused primarily on Northampton County; however, we firmly believe that the processes and successes found in Northampton County are applicable to other regions and communities within the Commonwealth of Virginia and should be viewed as such.

I do not want to belabor the point; however, as you can see, we have been very successful nationally with our programs and initiatives (see attached accomplishments). This success has to a large extent been due to efforts made by the Commonwealth of Virginia through the contributions, funding, and technical assistance provided by the Virginia Coastal Resources Management Program (Department of Environmental Quality). This assistance and the resulting federal, state, and local partnership has attributed to over four million dollars of planning, design and implementation funding for our Sustainable Development Initiative and have been based on sound and practical coastal management. However, I would like to reemphasize that "our efforts are not to produce an environmental nirvana but to meet an economic necessity and further, that our cultural and natural resources along with our people are, in fact, our marketing niche. Our environment, our history, and our culture are our one competitive advantage; not independent of each other but intricately connected to our economy and our future."

Among our successes, Northampton County has the unique opportunity to have the first sustainable technologies industrial park in the nation. Consequently, the Commonwealth of Virginia, if Northampton is successful in its development, is in the distinguished position of being the leading state for sustainable and economic development in the Country. We therefore strongly urge the Commonwealth to work in concert with our local and national partners to insure the success of this park. Northampton's efforts have been locally driven, encompass six diverse and comprehensive areas and as previously mentioned, are nationally recognized.

Our plan addresses the needs of arguably Virginia's poorest region and has given us not only hope but a comprehensive and directed plan for success. We believe that this type of development is the economic and industrial wave of the future. Not only because of the changing face of environmental concerns but because it makes good business sense.

Northampton's future is contingent upon this commitment. Our vision is predicated on public/private partnerships and our success will only be achieved through cooperation between federal, state and local governments. As such, we look to the Commonwealth:

- * to provide technical assistance and a lasting partnership
- * to be an advocate to the federal government
- * to provide funding within economic and political needs of this Administration (Governor's Opportunity Funds; United States Fish and Wildlife Service funds; economic development incentives; shell building program; industrial and recreational access road funds; primary road funds; statewide GIS system, etc.)
- * to cooperate with state agencies to expeditiously meet permitting requirements
- * to work with local government in addressing local, state and federal regulatory barriers
- * to provide incentives to regional planning offices to insure regional efforts
- * to provide local authority to address environmental issues such as vegetation and landscaping ordinances
- * to provide tax incentives for better resource management
- * to establish a statewide network (Internet) committed to sustainable development efforts, policies, programs and expertise, etc.
- * to help establish a comprehensive sustainable industries/businesses marketing plan
- * to encourage and monitor the real success measure: the transference of public investments into private development and investment.

In closing, we encourage this Task Force to promote joint resource protection and economic development in the Commonwealth, to develop model policies for sustainable initiatives (zoning ordinances, road design standards, etc.), to understand the unique needs of rural and urban communities in the Commonwealth, and to help facilitate local solutions to local problems and needs with state technical and financial assistance including state expertise, local training, state resources, appendix of national program actions and policies, "model program" funding and/or grant initiatives.

--- END OF COMMENTS ---

In addition to the presented information, I am also taking the liberty of expressing my position regarding the development of a statewide Sustainable Development Strategic Plan.

First and foremost, I would strongly encourage the Commonwealth of Virginia to initiate such a plan; however, I do not believe that it should be a top-down document with State control but rather a bottoms-up locally developed strategy, very similar to *Opportunity Virginia* and, in fact, consideration should be given to a regional planning process that could be integrated with *Opportunity Virginia* as individual regions give locally determined significance to Sustainable Development in their respective areas. As such, the State could provide assistance and support as previously stated to local initiatives and local governments to accomplish these tasks.

I believe that this type of broad-based, locally-driven planning is the central ingredient for successfully implementing a Sustainable Development Strategy/Program and emphatically believe that local governments should and must take a leadership role, working in concert with local citizens, agencies, organizations, and State and Federal partners in determining a Commonwealth of Virginia Sustainable Development Strategic Plan.

This process would not only build consensus in a community/region, it would insure local autonomy and control by the people being served which is absolutely essential. However, you will recall that in Mr. Greg Lowe's (Vice President of The Nature Conservancy) presentation, it became apparent that the Conservancy believed such a document (Sustainable Development Strategy) should be generated by the local community with minimal involvement of local government. As an appointee to the National Association of Counties Sustainable Development Task Force, we have debated this issue extensively and as a County Administrator and local government official, I believe it to be absolutely essential and critical that the local governments be not only actively involved but at the forefront of such sustainable development efforts.

My beliefs are predicated on three basic assumptions:

- (1) that the governing body of a community is the only organization that represents the entire population, whether that be town, city or county;
 - (a) By virtue of this representation, the local community retains control over the process and the end product through political autonomy.
 - (b) Conversely, if an organization such as The Nature Conservancy with vast economic and/or personnel resources assumes the leadership role, there is no guarantee of local control over this critically important community process, the subsequent team building and the ultimate strategy.
- (2) The second reason that I ascribe to local government involvement and leadership is that it is these duly elected public officials who have the responsibility, duty and authority to determine public policies (building and zoning ordinances, etc.) that would best facilitate and encourage Sustainable Community Development.
- (3) And finally, as a local government, both local funding and access to State and Federal resources can be accessed most efficiently and

expeditiously to further enhance a comprehensive and successful program.

These premises have been formulated as a result of the experience on the Eastern Shore of Virginia in its Sustainable Development efforts. While a great deal of energy, effort and commitment has been generated over the years, it is clear that without the governing body's active involvement, approval, endorsement and collective will, to the implementation of Sustainable Community Development Initiatives, the overall success achieved would not and could not have been possible in Northampton County.

In summary, while I concur with Mr. Lowe that Sustainable Community Development needs to be a grassroots partnership, I believe that the local government(s), who are the elected representatives of the populations served, must take an active leadership role in the development of any sustainable programs and subsequent policies in a community and further, must do so in partnership with local citizens and both public and private partners at a regional, State and Federal level.

The second item I would like to address is that given Northampton County's efforts in developing what we hope to be the nation's first Sustainable Technologies Industrial Park, and our initial client, Solar Building Systems, Inc., we believe it to be appropriate and in both the County's and Commonwealth's best interest to develop a State Renewable Energy Institute at the Port of Cape Charles Sustainable Technologies Industrial Park. As County Administrator, I believe that it is a perfect match for the two-year efforts made to date in showing the economic advantages of Sustainable Development on Virginia's Eastern Shore and would provide a real asset and resource to the Commonwealth in future research, study, design and implementation of renewable energy sources. Northampton County is now working with the Rural Policy Research Institute in locating a soybean-diesel conversion plant in our Park. Obviously this Renewable Energy Source which is being funded in part by the Department of Defense, further enhances the Park's feasibility, should enhance any efforts by the Commonwealth of Virginia with regard to renewable energy, and hopefully provide an incentive for locating an Institute in Northampton County.

As such, we believe that the Commonwealth should consider encouraging efforts by State institutes of higher learning either collectively or individually in the development and funding of a Virginia Renewable Energy Institute to be located in the Port of Cape Charles Sustainable Technologies Industrial Park.

Again, thank you for this opportunity to share Northampton's insights and please remember that "Sustainable Economic Development is determined not so much by what the business or industry is, but rather how you do the business." If you have any questions or concerns, I would be more than happy to try and address them.

APPENDIX K



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Major Programs Office

Recommendations to Task Force Studying Sustainable Development L. Gregory Low, Vice President, The Nature Conservancy

A comprehensive program for sustainable development has been established on the Virginia Eastern Shore and a similar major initiative is well underway in Southwestern Virginia's Clinch Valley. The Nature Conservancy has played a key role assisting and implementing the sustainable development programs in both of these areas, as well as in other communities across the nation (see attached editorial).

The Nature Conservancy is working to translating the theory of sustainable development into tangible results. For example, under the Conservancy's leadership, the Virginia Eastern Shore Sustainable Development Corporation (see attached business plan summary) is being launched with a goal of creating 250 jobs over five years through development of environmentally sound products and businesses. The new for-profit company has received start-up capital commitments totalling \$2.7 million from investors including the Virginia Environmental Endowment, Crestar Bank and others. The Corporation has recruited a highly experienced President & CEO, Richard Schreiber, who formerly managed the business operations at Colonial Williamsburg. Coupled with Northampton County's pioneering Sustainable Technologies Industrial Park and other community efforts, these initiatives have positioned the Virginia Eastern Shore as the nation's leading example of successful sustainable development. Building upon its work in Virginia and other states, the Conservancy recently formed the Center for Compatible Economic Development to create, test and demonstrate new approaches for environmentally sound development (see attached summary).

A recent statewide poll conducted by the Virginia Environmental Endowment found that 88% of Virginians support planning for development and economic growth in such a way that it doesn't endanger the environment. Virginians in their local communities are ready and eager to embrace and implement sustainable economic development efforts that do not degrade the environment. However, despite the promising beginnings and the public's strong support, no systematic effort is being made to achieve sustainable ecosystems and communities across the Commonwealth.

I appreciate the opportunity to share with you the following conclusions and recommendations to help reach this goal.

- (1) Key success factors for an effective local program for sustainable development
- (2) Specific action recommendations for a Virginia strategic plan

Key Success Factors for Sustainable Development at Local Communities and Ecosystems

1. Local Leadership -- Citizen and Staff "Sparkplugs"

- * The single most important success factor is local leadership
- * Critical that community leadership emerge *outside of local government*
- * One or more local citizen "sparkplug," who can galvanize broad community support and participation
- * A good staff person with certain key skills and attributes, in a non-governmental organization (i.e. not hampered by agency or local politics) to help guide the process and "conduct the orchestra"

2. Community Readiness

- * A sense of place that defines the community; an appropriate geographic scale which reflects local ecological, economic, political and cultural considerations -- e.g. village, county or a well-accepted region.
- * A sense of "crisis" within the community often helps spur action
- * Success cannot occur in a setting of extreme community polarization

3. Collaborative, Broadly-Based-Local Process and Institutional Leadership

- * A process for developing a shared vision and a positive action plan among *all* major community stakeholders
- * Broadly-based and inclusive process often involves a collaborative effort among local civic institutions -- e.g. Northampton Economic Forum
- * Process must include, *but not be dominated* by environmental interests, by development constituencies, or by government
- * A professional outside facilitator is very helpful, if not vital
- * An effective institutional arrangement must be organized to provide continuity of effort

4. A Strategic Approach

- * Good ecosystem, socio-economic and business planning is foundation
- * Good strategic planning requires:
 - Assessment of environmental, economic and social conditions
 - Understanding of key threats
 - Analysis of the community's comparative economic advantages
 - Scoping of compatible development alternatives
 - Solid business feasibility assessments
 - Strategies to address key opportunities and threats
- * A strategic approach tests and explores alternative approaches, assesses results, and makes adjustments over time -- not "cast in concrete"
- * Need appropriate control systems, monitoring and measures of success

5. Outside Expertise & Support

- * Need technical skills and outside expertise in economic planning, business planning, ecology, facilitation, community development, etc.
- * Experienced outside person who serves as "mentor" and sounding board

6. Adequate Funding

- * Funding for local staff, consultants and program start-up expenses (e.g. assessments, community forum, business feasibility studies)

7. Successful Action

- * Early projects which show tangible results -- including conservation, economic development and community development success
- * Success then begets more success (as shown in Northampton County); conversely, without tangible results the program will fizzle and die
- * Persistence and continuity of effort for long-term results

Note: The above common ingredients are drawn from my assessment of experiences in Northampton County, Clinch Valley and Willis Wharf, VA; ACE Basin, SC; Malpai Borderlands, NM; and studies by colleagues of other local efforts. This list represents a working hypothesis. Greg Low, August 1995

Recommendations for Virginia Sustainable Development Strategic Plan

Principles

- * Tangible Results: Create businesses and jobs without degrading the environment
- * Focus: Narrow the definition and scope of program
- * Test: Deploy new tools and approaches based upon proven success stories
- * Decentralize: Real work in real places
- * Privatize: Draw upon proven talent and experience from outside of government
- * Leverage: Get big results from modest investment/reallocation of state funds
- * Assessment: -- Task Force assess results in two years and make adjustments

Definition and Scope

- * Sustainable development must be accomplished place by place
While some environmental and economic issues must be addressed at a larger scale, there is an emerging consensus that solutions for sustainability must come at the local ecosystem and community level, driven by new visions and empowered with new institutions.
- * A decentralized approach -- focus on local communities and ecosystems
- * Simple working definition:
Economic development and natural resource uses that enhance the local economy, achieve community goals and protect the environment

Goals

- * To encourage and assist successful sustainable development programs in local communities and ecosystems
- * To create a model approach which can be expanded throughout the Commonwealth

Strategies

- * Over the next two years, develop and test a program designed to:
 - Provide civic leaders from interested Virginia communities a "primer" and introductory training session on sustainable development
 - Provide key staff and citizen leaders from 12 selected Virginia communities with advanced training programs, a comprehensive "how to" workbook, and follow-up assistance on ecosystem conservation and sustainable development
 - Provide intensive, hands-on assistance and financial support to 4 selected, qualifying Virginia communities to develop and implement comprehensive, enduring local initiatives for conservation and sustainable development, including business plans for significant job creation
- * Communities to be selected through competitive process, using criteria including key factors for success, significant natural resources, local funding support, etc.
- * Program to be developed and implemented by a team of proven outside providers, under the auspices of appropriate State agencies.

Program Budget

- * Estimated at \$700,000 over two years
 - \$350,000 for introductory and advanced training programs; how-to workbooks; and hands-on assistance to 12 Virginia communities (four intensive programs)
 - \$350,000 for implementation grants: \$75,000 each to four selected communities, requiring at least \$25,000 local match
- * New investment funds or redeployment of existing economic development funds

APPENDIX L

RESOURCES

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William C. Shelton, Council on Rural Development, Department of Housing and
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