to invest: 4) Transform the Role of Government: at all levels. government should be a facilitator for private-sector innovations and public-private partnerships ("some regulation will always be necessary, but it should be limited, focused, and reasonable"); 5) Become an Aspirational and Inspirational Nation: advance lofty but achievable goals to improve the environment; 6) Position America to Meet the Challenge: require our leaders to formulate positive, pragmatic, and proactive public policies to avert looming environmental crises; 7) Encourage Scientific and Technical Literacy: federal agencies such as NSF should "think big" about reforms in public learning; 8) Invoke the Spirit of Collaboration and Cooperation: a mainstream, nonpartisan approach to environmental problem solving will engage America's citizens in pragmatic change; 9) Support Philanthropy and Investment: a coordinated, strategic philanthropy will boost the increasing priority of environmental issues; 10) Enlist the Nation: "recruit an army of environmental foot soldiers to tenaciously pursue a new course for our nation."

The authors go on to discuss respect for the earth, the principle that "richer is greener," zoos and aquariums as North America's largest environmental conservation movement, overcoming the climate of adversarial politics, avoiding "the excesses of media hyperbole" to build trust among citizens and find common ground, the top priority of a government plan to significantly and rapidly reduce US dependence on oil, green enterprise becoming the norm throughout the world, the Clinton Global Initiative that aims to accelerate active philanthropy, and leading the way to a better world ("executive leadership is a critical variable"). [NOTE: Some of these conservative ideas go back to earlier and more combative Gingrich books: Window of Opportunity: A Blueprint for the Future (TOR Books/St. Martins, 1984), Contract with America (Times Books, 1994), and To Renew America (HarperCollins, 1995; brief version in The Futurist, July-Aug 1995; FSA#13648).]

(10-point environmental agenda)

ENVIRONMENT/PRINCIPLES 29:10/369 (AB) Environmental Principles and Policies: An Interdisciplinary Introduction. Sharon Beder (Prof of Social Sciences, U of Wollongong). London UK and Sterling VA: Earthscan, 2006/304p/\$47.50pb.

Discusses six major principles of relevance to environmental issues, with broad acceptance around the world, and uses them to evaluate a set of environmental policies. 1) The Sustainability Principle: growing out of traditional nature conservation and introduced in the 1960s and 1970s by Adlai Stevenson, Kenneth Boulding, Herman Daly, the Club of Rome, the Blueprint for Survival by the editors of The Ecologist, and in the 1980s by the World Conservation Strategy and the Brundtland Report (the ideas of "carrying capacity" and "ecological footprint" build on this principle); 2) The Polluter Pays Principle: introduced by the OECD in 1972 and later including the notion of extended producer responsibility; 3) The Precautionary Principle: dates back to German and Swedish environmental policy in the 1970s, and first recognized in an international agreement in 1982 in the World Charter for Nature; the inadequacy of the reactive approach became undeniably apparent after a series of unpredicted environmental disasters; 4) The

Participation Principle: many governments introduced requirements for the environmental impact of certain proposed activities to be assessed in the 1970s and 1980s; the right to participation (the right to be consulted) did not spread until the 1990s; 5) The Equity Principle: during the 1980s the concept of sustainability was married with the idea of equity or fairness, particularly justice to future generations; the Brundtland Commission (World Commission on Environment and Development) played a prominent role in popularizing sustainability in equity terms; 6) Human Rights Principles: the 1948 Universal Declaration of Human Rights does not specifically mention the environment, but it has since become clear that environmental protection supports some of the most fundamental of human rights; the OECD saw the right to a "decent" environment as a fundamental human right in 1984, and the right to a healthy environment has been incorporated into the constitutions of >90 nations since 1992.

Chapters discuss these six principles, as well as measuring environmental value, monetary valuation and the basic principles, prices and pollution rights, economic instruments for pollution control, and markets for conservation (quotas, trades, offsets, banks). Concludes that "the fundamental goals and assumptions underlying economics-based policies are at odds with the environmental and social principles concerned communities and governments around the world are seeking to achieve." Economics-based environmental policies are primarily designed to achieve economic efficiency, facilitate economic growth, and allow businesses to decide how they would meet environmental expectations. Such policies also perpetuate existing social and power relations, enabling the wealthy to exert control over natural resources and concentrating the worst environmental burdens in poor areas. [NOTE: An excellent survey of the history of the six principles, which are quite different from those of Gingrich/Maple, but not necessarily incompatible. The harsh but sophisticated critique of economics does not include mention of environmental economics as an alternative to conventional economics (see FS *25:12/579).] (six environmental principles)

ENVIRONMENT/INVESTMENT RISK 29:10/370 (A) Climate Policy Uncertainty and Investment Risk. International Energy Agency. Paris: Organisation for Economic Cooperation and Development, May 2007/142p/\$97pb. [See 29:10/355 for 20% discount offer to FS subscribers.]

In coming years, the world will need more electric power but fewer GHGs. Providing for abundant and clean energy will require investment of >\$11 trillion to 2030, in the IEA World Energy Outlook 2006 Reference Scenario. But climate policy uncertainty weakens investment incentives for low-carbon technologies, and could lead to sub-optimal choices. "It is certain that in the long run, we will have to find ways of satisfying our energy needs with near-zero net emissions of greenhouse gases in order to avoid the worst damage from climate change. This will require near total change in the world's energy infrastructure." It is uncertain, however, when this transition will start, and how quickly it will proceed. How soon a near-zero-emitting energy infrastructure emerges will determine the degree of climate change. "The rate of transition will be constrained by the costs of transition, vested interest in the status

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