

## MEET BARRY COMMONER: THE PROPHETIC ENERGY VISIONARY

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Barry Commoner

Barry Commoner is one of the true pioneers of seminal thinking on environment, development and energy. Even though a biologist by training, he was a truly interdisciplinary scientist and thinker. Beginning with the early 1960s, he published many original works on the future of science, environment, development and energy. His major works include: *Science and Survival* (1963), *The Closing Circle* (1971), *The Poverty of Power* (1976), *The Politics of Energy* (1979), and *Making Peace with the Planet* (1990). In 1970, the 'Time' magazine featured him on their cover and hailed him as a standard bearer of "the emerging science of survival." He combined science with activism. In 1980, he contested the American Presidential election as a nominee of the Citizen's Party. He justified his political involvement thus: "I am involved in politics because it has become crystal clear that the issues I have been concerned with—nuclear issues, environmental issues, energy issues—are not going to be solved simply by protest....the necessary big change could occur only from inside (the political spectrum). Public pressure from outside was not enough." He liked to call himself a "congenial optimist". Commoner's contribution has been hailed as "a supremely important challenge to the morphing of Big Science into the handmaiden of the chemical and nuclear industries."

In this issue of *Green Energy*, following my brief introduction about Commoner, we present edited extracts of his 1979 book 'The Politics of Energy' (Pg.28). The book was intended as a critique of President Jimmy Carter's energy plans. Carter had, during his election campaign, declared that nuclear power would be a "last resort", a position he reiterated in his public statements. However, after his election, his private statements, energy plans and legislative action were all intended to promote an already dying nuclear industry in the United States. His administration, while paying lip service to solar energy, failed to take decisive action to promote it. In this book, Commoner spoke against nuclear power and for solar energy. For him, the term solar energy covers most forms of renewables—and rightly so—covering different forms of solar PV, solar thermal, wind power, biomass power, biofuels, marine renewables and even hydroelectric power. However the extract that follows in the next page pertains to only solar PV and solar thermal. He demonstrates why the Carter Plan, instead of solving, will merely prolong the energy crisis. Commoner sets forth the case for a

new energy system based on renewable sources and examines the two choices we have—solar energy (including wind and bioenergy) or the nuclear breeder technology. Besides the inherent dangers of nuclear accidents and the unsolved problem of nuclear wastes with life of up to 2,00,000 years, he points to its prohibitive real costs. He shows how we can begin serious use of solar energy and all this in 1979!. His closely reasoned book leads to an inescapable conclusion: despite governmental arguments in favour of nuclear, the realities of the world are pointing us to the solar solution. It is a strong answer to many, including several Indians, who wrongly perceive nuclear power as a clean and sustainable energy source.

There are some absences in Commoner's vision. For eg, he does not talk of producing electricity from Concentrated Solar Power (CSP). That is because when he was writing this book, CSP was not commercially proven. As we all know, the first CSP project in the US came onstream in 1984 only. But overall, the vision he articulated was far beyond his times. In fact, it required great intellectual acumen and vision to declare in 1979, as he did, that by the middle of the 21st Century, renewables will provide most of human energy requirements. Many right thinking people today recognise this. Many countries, especially in Europe, have realised the urgency of such a transition. The International Energy Agency, which was till recently a strong advocate of fossil fuels, is now a convert, and talks about a 100 percent renewable energy economy. The IPCC recently came out with a detailed document articulating this theme.

Such a hundred percent renewable system would necessarily need hydroelectric power which is the best baseload source. Even with storage technologies being deployed, intermittent renewables like wind and solar alone cannot sustain a national grid system. Commoner's vision of a solar future encompasses all renewables which ultimately originates from sunpower, including hydroelectricity. In 'The Politics of Energy', he even devotes one chapter to discuss how a transition to a solar system can be effected.

Many in India, especially in the policy-making sphere, still continue to doubt the efficacy of renewables to provide a civilised future. We hope Commoner's three-decade-old writing would be an eye-opener to them. Particularly noteworthy for Indian policymakers is what Commoner talks about government intervention to bring down solar prices, his forebodings about the real cost of nuclear power, and his suggestions for diverse strategies for solar energy development in the country vis-à-vis a monolithic policy. Typical top-down monolithic approaches do not give the best results. The edited extracts being published in the following pages—'Solar Versus Nuclear Energy: Politics of Choice'—are from Chapters 5 and 6 of the book, 'The Politics of Energy'