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Judiciously harnessed, this energy mine has an untapped capacity far beyond meeting the country's daily demand of 4,000 megawatts of electricity .

globally in an entire year. Contrary to the publicised notion that it will take a miracle to solve Bangladesh's energy crisis, it is indeed a "development" blunder of monumental proportions that such a crisis could be contrived in Bangladesh.

An infrastructure is evolving. A pilot phase with various renewable energy technologies began at the NGO, private, commercial, academic, and governmental levels during the late 1980s. Since the late 1990s, a much bigger combined thrust has come from more NGOs, governmental and semi-governmental agencies, universities and businesses.

Currently, there are over 200,000 installed stand-alone PV (Photovoltaic) systems, generating over 7 megawatts of power. There are also about 17,000 mostly home-scale, bio-gas plants in Bangladesh, installed by the Fuel Research Institute of BCSIR, Brac, Grameen Shakti, and some other NGOs and private entrepreneurs. Although there are only a few installations, wind turbines, micro-hydro, and grid-connected PV systems show great promise.

It's time to build upon this foundation on a massive scale. There are many options: stand-alone PV systems of various designs and scales; hybrid systems combining PV and wind turbines or ecologically balanced hydro-electric systems; distributed generation through grid-connected PV systems for urban and other gridded areas, installed on roofs and walls, which feed the grid with solar-generated electricity and reduce stress on the power line; solar powered IPS systems; solar thermal systems for heating and cooling; wind turbines ranging in sizes from 250 watts to over 3 megawatts each; utility-scale, megawatts-size, wind farms and PV fields, some combining electricity generation and agricultural production; off-shore wind farms; industrial and community scale bio-gas plants generating gas and electricity, with superb quality organic fertiliser and fish feed as the by-product; various types of solar cookers; solar greenhouses; PV, wind turbine and other renewable energy technology hardware manufacturing plants through turnkey transfer.

All these options have successful examples around the world for Bangladesh to judiciously emulate and innovate. The capital cost will be minor compared to the alternative -- the dead-end fossil-nuclear path, leaving the country only more economically impoverished and indebted; environmentally ruined, and politically vulnerable.

A national policy, with a Policy-Programs-Practice continuum, must be formulated and implemented, requiring the following:

- Maximising conservation and efficiency in the use of non-renewables, while utilising them only as transitional resources.
- Transparent, accountable and equitable public-private partnerships to maximise efficiency and expediency.
- A moratorium on further entrenchment into the non-renewable path, combined with disincentives such as a reduction of subsidies for non-renewables and a progressive carbon tax and cap on carbon production.
- Proactive and massive utilisation, investment and development of appropriate renewable options.
- A combined offering of public education, technical support, a legal framework and financial incentives to renewable energy users and producers.
- Collaboration between experts and stakeholders in both non-renewable and renewable energy fields to devise an integrated and comprehensive public policy -- holistically