**Options for a national energy policy**

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The commencement of commercial operations of the state-of-the-art Karachi Nuclear Power Plant (commonly known as KANUPP-2 or K-2) of 1,145 Megawatts of electricity in the next year has been declared another milestone in national energy security and economic progress. KANUPP-1 (K-1) was established with the Canadian government’s help, while K-2 has been established with the Chinese government’s assistance. K-1 was commissioned in 1971-72 and stands to be decommissioned in the near future. Another nuclear power plant, K-3, will be commissioned in 2022.

Along with Karachi, several nuclear power plants have been set up in and around Chashma, again with Chinese assistance. Further nuclear power plants are planned in the future—with Chinese help, to meet future energy needs. Some of these nuclear power plants are part of the CPEC programme. Similarly, as part of our energy policy, oil, gas, and coal-fired power plants have been set up.

[Will anti-rape ordinance reduce recidivism?](https://nation.com.pk/21-Dec-2020/will-anti-rape-ordinance-reduce-recidivism)

However, reliance on nuclear, coal, and furnace oil-fired power plants has a few repercussions for a technology-starved, cash-strapped, oil-importing country such as Pakistan. Nuclear power plants’ operation and decommissioning require state-of-the-art expertise, while safe storage of radioactive waste generated during the power plant’s lifetime operation is difficult, hazardous, and costly. Similarly, importing oil for our power plants has increased our import bill, strained national foreign currency reserves, and is testing our relations with Middle Eastern countries. Coal is considered a major pollutant to our environment. Also, in a larger context, developed countries are moving away from nuclear, coal, and oil-fired power plants to more cleaner and sustainable sources of energy, where possible. Thus, what sort of options should we be promoting in our energy policy in the long term?

On one hand, we have a sparsely populated Balochistan, whose neglected population has the right to electricity and water, among other things. However, laying electricity transmission lines in such a vast province is not economically feasible. But Balochistan is sun-drenched, and its coastal areas are windswept. Therefore, promoting wind energy in coastal areas and solar energy in remote areas of the province seems not only viable but also a cheaper option.

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Hydel power is another cheap source of energy, with multiple benefits. Vast tracts of land in Balochistan, KP, and Punjab are lying uncultivated due to lack of strategic water reservoirs, which store water, prevent floods, and help irrigate lands, which thus helps in national food security—an important factor in a populous country. The recent wheat and flour crisis is an ample manifestation of what food shortages can do to any sitting government. Khyber Pakhtunkhwa has many natural locations suitable for the construction of water reservoirs with minimum costs. Thankfully, since President Ayub’s era, only recently, new strategic water reserves, planned during the President Musharraf era, are being built. The construction of these reserves will not only create short and long-term economic activities but also help generate cheap electricity and irrigate lands.

Thus, our energy and food policy should be strategically coupled. Consequently, energy generation through water, sun, and wind should be encouraged and pursued in the long run, as these sources of energy are not only sustainable and cost-effective but also support our national food security, lessens our dependence on foreign expertise and friends, and do not squeeze our already limited monetary reserves.