Can India’s abandoned coal mines be turned into forests? Because our digging for today could leave an empty void for the future generations.

Coal continues to be the mainstay of India’s energy, fueling more than 60 per cent of the installed electricity generation capacity in the country, while coal-based power plants produced more than 75 per cent of the + 1100 Billion units (1100 TWh) of electricity generated in FY16. This trend will continue into the foreseeable future, since 80 per cent of the power generation capacity added in the XIth Plan period (ending next month) till date is coal-based. And, over 90 per cent of the 612 Mt of coal produced in India in FY16 was produced from surface (opencast) mines, which have had a massive and a near-permanent effect on the environment.

But here’s how other numbers add to the coal conundrum. India has only 2.4 per cent of the world’s surface area but sustains 17 per cent of the World’s population. Surface mines then need to be “healed”. They are the sores on which the balm of policy and planning must be applied — immediately.

While policies, statutes, and structures in India to address air and water pollution in mines are already in
existence, there has been no thought on mining and land reclamation. Consider this. The total volume of excavation required to produce coal in India will only increase significantly. During a meeting of the Parliamentary Consultative Committee on August 11, last year, it was stated that Coal India Limited had identified “476 mines for closure and Mine Closure Plans (MCPs) of 445 mines had been approved until July 31 of 2016”.

The current mine closure guidelines were issued by the MOC with the right goal of creating a “self-sustained ecosystem. Here are a few rules.

While each coal mine owner, applying for approval or re-validation of his mining plans, is mandated to deposit money into an escrow account controlled by the Coal Controller (CC), the CC is not equipped to reclaim or restore these mining areas in case the mine owner fails to discharge his responsibility.

Further, there is no roadmap for the reclamation of abandoned coal mines (or mines without proper closure), which number nearly 200 under CIL’s command alone.

It is then essential to examine world-wide best practices in this area. Mine closure ultimately decides what is left behind as a legacy for future generations. For example, the National Mining Association in the US states that, the goal of sustainable development is to ensure that, “our actions meet the needs of today without compromising ability of future generations to satisfy needs”.

In the four decades since the Surface Mining Control and Reclamation Act (SMCRA) was passed by the US Congress in 1977 — to regulate environmental effects of coal mining, this Act has had a major impact on the mining industry including on the development of opencast coal mining and reclamation technology. In Australia too, the country has turned “final voids” to become useful for tourism, agricultural, and ecological uses. But how can India pay for such turn-arounds? The answer lies within policy.

Since more than 80 per cent of coal used in Indian power plants is mined within the country, and since the GOI intends to reduce the share of coal imports further, there is a need to integrate energy and mining policies with environment policy. This calls for new policy initiatives at the national and state levels, which can be partly funded by the Clean Environment Cess currently levied at Rs 400 per ton of coal & lignite used in India. This cess is projected to contribute Rs 28,500 crore to the central government’s fund in FY 17 alone, while about Rs 54,000 crore has been collected by the Centre since this cess was introduced (at Rs 50 per tonne) back in 2010. Sustainable development and inter-generational equity require that a part of this fund should also be used to implement measures leading to restoration of coal mines.

But while most persons will agree with this over-arching goal, only Rs 9,000 crore has been spent through the National Clean Environment Fund (NCEF) while another Rs 17,500 crore has been allocated to various ministries over the years.
The writer is an energy expert at National Institute of Advanced Studies, Bengaluru.