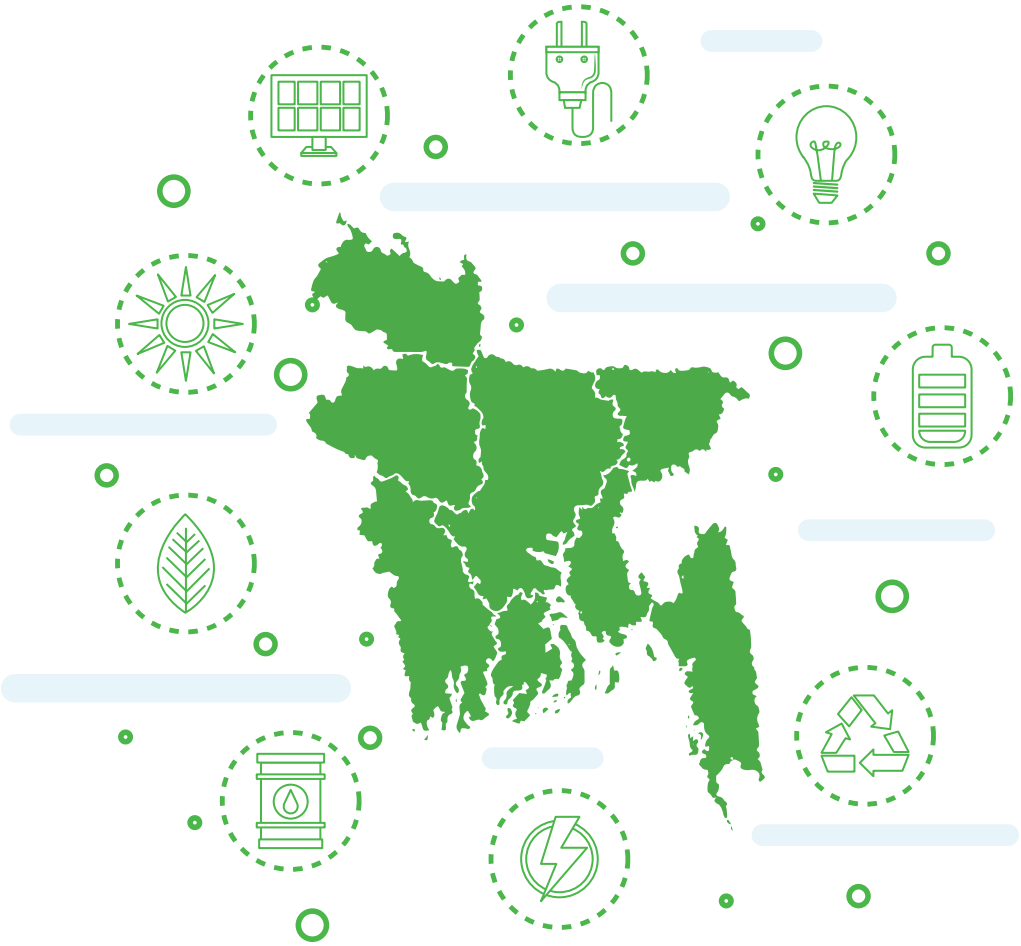
Although the journey has been pioneered by Infrastructure Development Company Limited (IDCOL), we are still at the beginning stage of adopting energy efficiency and have a long way to go to reach our targets. In Bangladesh, as with many of the other developing economies, the awareness level for EE&C measures is generally low. This is partially due to energy prices that are set at an artificially low level. Furthermore, gas tariff structure for households has always been a flat rate pricing inducing no incentive among the public to save gas. This is true not only for public in general, but also for policy makers and industries. There have been only limited attempts to implement measures to save energy in motors, lighting, air-conditioning, and cooking at homes, offices, and factories. One of the barriers lies in the lack of understanding of EE&C mechanism, i.e., purchasing highly efficient equipment at relatively high price can result in saving money by getting a return subsequently by saving energy. Such basic knowledge needs to be penetrated.

Not only Japan but also the AFD, ADB, World Bank, KFW among others, have been supporting Bangladesh to promote EE&C policies and providing low interest rate loans for promoting energy conservation. However, these existing energy conservation promotion facilities are not always serving their functions effectively for a number of reasons, such as offered interest rates are not attractive while overall market interest rates are lowering; Such concessionary financing facilities are not well known; The procedures are complicated; Loan appraisal procedure is commonly lengthy etc. Considering these situations, it is necessary to learn lessons from the existing energy conservation promotion facilities and incorporate practices that are more effective in a manner. Specifically, paying attention to and taking actions regarding the following points are crucial; (1) Need to structure a simple and transparent appraisal procedure; (2) Need to secure an attractive lending condition with concessionary interest; (3) Need for awareness-raising; (4) Need for data collection on energy conservation status as the effect of adopting those EE&C; (5) Need for penetration of EE&C measures; (6) introducing the regulations which enable the introduction of a good number of energy auditors; (7) enabling energy efficiency labelling schemes etc. The concessionary loan facility needs to be attractive for the sub-project proponents and the purchasers. Such attractiveness will become a key for penetration of the EE&C equipment. Loan attractiveness will depend not only on the level of interest rate but also on the simplicity of the loan application and appraisal procedure.

One of the reasons why policymakers and industries are not aware of the significance of promoting EE&C is the lack of knowledge on the practical measures relating to the same. It will be useful to conduct programmes for the government, industries, and the public, to announce practical examples of the introduction of EE&C equipment and effective usage and operation. By penetrating the practical success examples of EE&C, it is expected to result in awareness-raising for implementing EE&C in Bangladesh.

The most basic knowledge is that energy consumption can be reduced substantially by introducing eligible technologies and equipment in industries, business forms and residences. In other words, it will be meaningful to penetrate the comprehensive advantage of reduction of energy consumption, reduction of production cost and finally improvement on business profit, by introducing EE&C technologies. Such is also expected to appeal the effect on the reduction of financing cost.

With the formulation of suitable regulatory measures and incentive mechanisms in accordance with nationwide actions for energy conservation, 'primary energy consumption per GDP' can be reduced below 2013 level as the targets have been set out in the Master Plan for achieving 15% reduction by 2021 and 20% reduction by 2030, compared with 2013 value. We aim to accomplish the target for realizing the self-reliant EE&C society by 2030 with the final goal to realize a self-reliant cycle in which people will proactively and voluntarily save energy, rather than through compulsory EE&C activities.



Sustainable cold chains can provide the twin benefits of food and energy security

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The adverse effects of climate change are there for all to see. The recent heat wave in Europe is one of the many extreme weather events being borne out of climate change. In such a situation, it becomes imperative to decarbonise high emission sectors. Particularly the cooling sector, as the rising temperature makes it highly critical, and its relatively high emission footprint is one of the major contributors to global warming.

For India, timely and decisive action through the development and implementation of the India Cooling Action Plan, has given it a unique opportunity for potential long-term positive outcomes in addressing India's cooling needs. The requirement for space cooling is traverses across multiple sectors, ranging from residential and commercial buildings, cold-chain, refrigeration, transport to industries.

The cooling demand from cold-chain sector may constitute a small portion of the aggregated cooling demand, however, its significance with respect to driving energy efficiency in the country cannot be undermined. The sector has positive implications on the environment and is a growth driver for increasing farmer's income in the country. India produces one of the world's largest volumes of milk fruits and vegetables, yet only 10 percent of it is processed for consumption.

The clear solution here is to scale up investment in cold chains, which are globally the vital link between farms and markets. Due to the perishable nature of produce, the current lack of cold chains leads to massive losses for the Indian farmers. However, according to ICAP, there exists a huge gap of approximately 85-97% between the required and the current capacity for the three components of cold chain: pack-houses, reefer transport and ripening chambers. Thus, the aggregate capacity in the country to adequately manage, store and preserve the agricultural produce post harvesting is largely insufficient.

To optimise the potential of India's primarily agriculture-based economy India needs to invest significantly in cold storage facilities. The government is investing in many new large-scale integrated cold chain projects. With this anticipated boom in cold storage, the time is opportune to ensure that our upcoming facilities are energy efficient. Unlike simple appliances like LEDs, it is not feasible to retrofit India's cold chains due to their sheer scale, as well as the complexity of the logistics involved. Instead, it is important to consider the immediate benefits that India can access from efficient cold chains. Access to affordable cold chains also delivers benefits to India's food producers. The knowledge that they have a dependable cold chain at their disposal can support market-led initiatives to supplement their incomes, especially for the many millions of small farmers. Along with produce and grain, smallholder farmers can produce higher-value processed products.

The need of the hour for cold chain sector to boom is to bring various business models that can work out technology and logistics both together to achieve a considerable reduction in cooling cost of produce, while also bringing down transportation cost. India's recent forays in energy efficiency, battery energy storage, and HCFC mitigation provide the starting point for this innovation. Ramping up cold chain infrastructure will greatly boost India's food and energy security.

Top energy trends from India & across the globe

Bill likely to make use of clean energy compulsory

The central government plans to introduce amendments to the Energy Conservation Act in the Parliament's monsoon session to put in place enabling provisions to make the use of clean energy, including green hydrogen, mandatory and to institute a regulatory framework for carbon trading. Once the parliament approves the Energy Conservation (Amendment) Bill, 2022, the Union government plans to issue administrative orders to implement it.

Transition from fossil fuels to renewable energy can pose fiscal challenges for India: study

According to a study by the International Institute of Sustainable Development (IISD), global transition away from fossil fuels to renewable energy sources could trigger financial challenges for India and major developing countries such as Russia, Brazil and China because of their high dependence on revenues from fossil fuel. The study finds that by 2050, overall fossil fuel revenues in Brazil, Russia, Indonesia, India and China could be as much as $570 billion lower than a business-as-usual scenario where governments fail to phase down fossil fuels enough to avoid the worst climate impacts.

14th Five-year Plan: long-term electricity scheme for Kerala mooted

An approach paper published by the Kerala State Planning Board says the 14th Plan would support the creation of a long-term electricity plan for the State that supports future expansion of power generation, transmission, and distribution. The plan will take into account the electricity requirements of various sectors including agriculture and industry. Underlining the need to increase capabilities in internal electricity generation, the approach paper observes that the State met 78% of its electricity requirement in 2020-21 through imports from other States. In fact, in some months this dependence was as high as 90%.

NTPC inks pact with Moroccan Agency for Sustainable Energy

NTPC has inked a pact with Moroccan Agency for Sustainable Energy (MASEN) for cooperation in renewable energy. The MoU between NTPC and MASEN, which are pioneers in the field of renewable energy generation, promises to usher in the joint development of utility scale projects based on renewable energy in Africa. Through this cooperation, it is intended to support services for capacity building, share experience, know-how and expertise in the areas of mutual interest, especially in the field of research and development. The cooperation may witness NTPC and Masen exploring common development opportunities in renewable energy power projects in other African Countries.