



## UREA FERTILIZER FACTORY LIMITED

### Untold Story

Urea Fertilizer Factory Ltd (UFFL) is a government-owned public sector company under Bangladesh Chemical Industries Corporation (BCIC), the largest industrial conglomerates of Bangladesh operating under the Ministry of Industry, Government of Bangladesh. BCIC owns all the fertilizer company of Bangladesh, except one multinational fertilizer plant, where BCIC also has significant stake. Besides fertilizer, BCIC also has manufacturing plants in many other sectors, such as pulp and paper, industrial chemical, plastics, pharmaceuticals, safety match, cement, insulation ware, etc. BCIC started its journey in 1976 with 88 nationalized enterprises.

UFFL is one of the oldest fertilizer plant in Bangladesh and meeting the country's major demand for urea fertilizer from the agricultural sector. Agriculture is the main contributor to the national economy of the country. As such, UFFL plays a very vital role in food production of Bangladesh and is declared as a key installation of the country by the Government of Bangladesh. The implications are that any major changes in the operation of the plant requires permission and clearance from the top Government Policy makers. Politically also, this plant is very important. More than 90% population of the country lives in rural areas and their major income is from agricultural products, especially rice. Short supply or production of rice creates a major crisis and as such every Government and political parties monitor the food supply and agriculture input supplies regularly with high priority.

In the backdrop of the above scenario, it was really a challenge to persuade the UFFL management to join GERIAP project. Both BCIC and UFFL's top management were initially very reluctant to participate in this project. However, considering their experiences of past two energy efficiency projects and understanding the benefits they may derive from this project, the plant management agreed to participate in the project. However, the UFFL management was not authorized to decide and as such the Institute of Management Consultants in Bangladesh (IMCB, who implement the GERIAP project in Bangladesh) had to approach the Secretary at the Ministry of Industries directly. It took more than six months to clear the official documentation formalities from the Ministry of Industries and subsequently, the BCIC Board of Directors and management. Meanwhile, plant management, on their own initiative, formed the company Cleaner Production and Energy Efficiency Team and allowed them to participate in the GERIAP training program and initial plant assessment. However, due to absence of security clearance, international consultants were not allowed to enter the main plant area officially. Being a key installation, access of the foreign personnel require security clearance from various government authorities and it takes long time.

Again, this plant is established in 1970 with huge facilities and its production process is also very complex. Therefore the assessment of such a huge plant requires a lot of planning, time and experienced technical expertise. International consultants provided by the GERIAP Project were not always experienced in working on such a big fertilizer plant and they also worked for a very short time. There was hardly enough time to even walk through a full process area of the plant. As such, a surface scratching exercise was done in the two in-plant assessment visits made by the international consultants. Despite these limitations, five options were identified and four of them were reported to be implemented partially. Full implementation of the options is not possible, as they require fresh investment and official clearance through several time-consuming bureaucratic steps. Also, the plant is unable to take any action which may disrupt the continuous operation of the plant.



However, being a very old and high energy consuming plant, it has many areas where the *Company Energy Efficiency Methodology* can be applied to identify even just simple and low cost options, which can be implemented with money from the plant's annual maintenance budget (instead of requiring fresh investments which would be the case for many high cost options). But it requires more in-depth assessment by walk through all the process areas with more baseline data on the past consumption of water, electricity and natural gas.

In summary, BCIC's management and Board of Directors may not have agreed to allocate funds for the implementation of any high cost options. This plant is very old and incurring huge expenses for wear and tear every year. Also, being outdated technology, the plant consumes huge amounts of energy, especially natural gas. As such, BCIC management is examining the prospect of dismantling the whole plant and installation of a energy efficient modern state of art new plant on the same premises.

## FOR MORE INFORMATION

---

### ***GERIAP National Focal Point of Bangladesh***

Mr. M Saidul Haq, President  
Institute for Management Consultants Bangladesh (IMCB)  
396 New Eskaton Road  
Dhaka 1000, Bangladesh  
Tel: +880-2-9353350-4, 9351102  
Fax: +880-2-9351103  
E-mail: [srgb@consultant.com](mailto:srgb@consultant.com)  
Web: [www.srgb.org](http://www.srgb.org)

### ***GERIAP Company in Bangladesh***

Md Eklas Uddin  
Additional Chief Chemist, RIC  
Urea Fertilizer Factory Limited  
Ghorasal, Narsingdi 1611, Bangladesh  
Tel: 880-2-9352550, 9350760, 880-6254-88076  
Fax: 880-2-9352550

#### ***Disclaimer:***

*This case study was prepared as part of the project "Greenhouse Gas Emission Reduction from Industry in Asia and the Pacific" (GERIAP). While reasonable efforts have been made to ensure that the contents of this publication are factually correct, UNEP does not accept responsibility for the accuracy or completeness of the contents, and shall not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance on, the contents of this publication. © UNEP, 2006.*

