

Water savings at Bagga Link Motors Ltd. in Patparganj Industrial Area, New Delhi

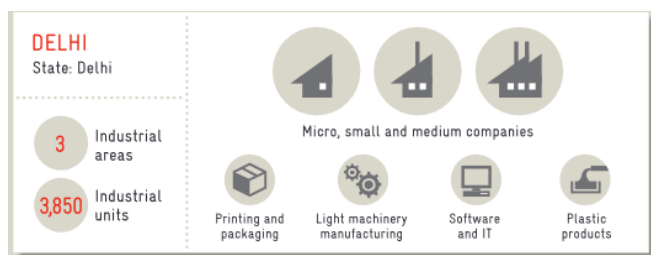
The SEIP-Project

Development in India is shaped by an advancing industrialisation. The risks associated with industrial development include increasing pollution levels, overuse of natural resources, and increasing amounts of waste and wastewater, that could lead to endangerment of ecosystems.

The objective of the “Sustainable and Environment-friendly Industrial Production (SEIP)” project of the Indo-German Development Cooperation is that private and public sector actors jointly implement strategies to achieve an efficient, environment- and climate-friendly industrial development. The implementation of the SEIP project works along three fields of action, which are:

1. Environmentally oriented modernisation of industrial areas.
2. Creation of enabling framework conditions.
3. Knowledge management and dissemination.

The Targeted Area



The Patparganj Industrial Estate is situated in East Delhi District of the National Capital Territory of Delhi, India. It is one of the three industrial areas in Delhi selected to showcase concrete solutions of how industrial production and sustainability can be reconciled. The estate is spread around an area of 134 acres encompassing 600 medium and small scale industries (MSME) in it. The industries are mostly not polluting (IT, service sector etc.) with a total work force is around 25,000 at present and an additional 4,000-5,000 floating population. The critically polluting industries include 8 to 10 industries engaged in electro plating business equipped with in-house ETP/STP, about 25 service stations for cars and two-wheelers. Other than these there are also

printing and packaging units, pan masala unit, garments units existing within the industrial area. Office of commissioner of industries, institute of packaging technology is also located within Patparganj industrial area.

In general, the SMEs do not have adequate environmental management systems in place. Waste and wastewater are often not adequately treated, and raw materials, water, and energy are consumed inefficiently further leading to avoidable waste and environmental pollution. SMEs lack the technical information as well as the knowledge about Best Available Techniques and Technologies in the Indian or international context.

Case Study Bagga Link Motors Ltd. Water savings

The Company

Bagga Link Motors Ltd., an automobile service station located in Patparganj Industrial Area in Delhi took initiative to make its operations more sustainable by increasing its energy and resource efficiency. With the support of an Indo-German expert team, an assessment of their current resource and energy usage has been undertaken in order to identify existing efficiency gaps.

Whilst the detailing of measures is currently still ongoing, some success has already been realised through the implementation of simple and low-cost measures.

The Measures - Saving potential and benefits

Problems identified	Measures (Solutions)	Costs	Results
1. Resource Efficiency Water losses in the car washing section due to open water hose	➤ Worker training to raise awareness and close the water hose after car washing	No cost	Reduced waste water and water consumption, translating into annual savings of 7,200 INR
Total costs:	No cost		
Total monetary savings:	INR 7,200 per year		
Estimated payback period:	0 Months		

Measure

After an Indo-German expert team conducted a comprehensive RECP audit at Bagga Link Motors Ltd., water losses in the car washing section were identified, as a high volume of water was wasted daily due to the use of open hose. Hence, the expert team suggested to train the workers to close the valve of the water hose after car washing in order to avoid fresh water losses.

The intervention led to a reduction of water consumption by around 15,000 litres per year, which translates into annual monetary savings of INR 7,200. Furthermore it allows for reduced waste water generation and helps avoiding undue water spillages. These savings are especially remarkable, as they were achieved through simple no-cost measures.

Lesson Learned

Despite the openness of Bagga Link Motors Ltd. towards environmental improvements in their operation, there was scope of amelioration regarding saving potentials within the company. Water wastage occurred because of a lack of knowledge and awareness, and not because of the absence of highly complex technology. Only by giving information and training the company staff to close the valve of the water hose after car washing, Bagga Link Motors Ltd. could achieve notable water and consequently cost savings. This rise in awareness among the workers on how small and simple changes in behaviour can generate substantial resource and cost savings will further generate increased interest in energy efficiency measures. Because of the positive experience achieved with the first measure Bagga Link Motors Ltd. was encouraged to undertake further interventions, such as arresting the leakages in the water pipelines and in the compressed air lines.

The fact that cleaner production is not merely a good deed for the environment but also helps to increase operational efficiency leading to cost-savings and increased competitiveness, is being vividly demonstrated by the implementation of these simple yet effective changes, further contributing to a change in perception regarding environment-friendly production, paving the way for more large-scale interventions in future.



Pic 1: Measure 1: „Before“ Open hose in the car washing industry



Pic 2: Measure 1: „After“ Closed hose