



## ENVIRONMENT

# Aiming for across-the-board sustainable operation

Pharmaceuticals being a resource-intensive industry, we are cognisant of the impact of our operations on the environment. We strive to minimise that impact through innovation. Aligning the design, development and manufacturing of our key products using processes that reduce resources, minimise wastage and eliminate the use of hazardous substances have helped us in this endeavour. The push has resulted in environment friendly practises throughout our drug manufacturing processes.

We are committed to reducing our carbon footprint by bringing down the use of fossil fuels and promoting the use of green energy. The move to switch to renewables would lower our manufacturing cost, improve efficiencies and reduce pollution. We are focusing on developing our own, low-cost APIs and KSMs using freely available raw materials and innovative technology. By adopting technologies such as flow chemistry, biotransformation and fermentation, the idea is to minimise carbon footprint right from raw materials to the finished dosage.



Energy consumption

Drug manufacturing remains highly energy-intensive, and the need of the hour is substantial process optimization. At Granules, we undertook energy conservation initiatives that helped reduce consumption. The initiatives include, substitution of higher capacity air compressor, AHU cut-off automation, improved condensate recovery, Optimizing Steam Consumption & Flash steam recovery at all API units. We are also increasing our share of renewable energy every year by installing solar panels at our plant locations. Internal reduction target has been taken and the same will be measured and published in future.



Reducing GHG emissions

Producing life-saving drugs involves green-house gas emission and we are working to bring these emissions down by incorporating changes such as design changes & interlocking in AHUs, air-cooled chillers replaced with water cooled chillers, retrofitting LED lighting, power factor improvements, dust collector and flash jet pumps to recover heat from steam condensate.



Water conservation

Water is an important input in the pharma manufacturing process. We are committed to achieving sustainable utilization of freshwater for all our operations that would essentially result in continual availability of safe, clean and affordable water for the communities we operate in. We implemented water recycling, rainwater harvesting, recovery of steam condensate, among other conservation techniques across our plants.



Waste management

Although regulated, the industry produces large volumes of waste that can be segregated as hazardous and non-hazardous. Our manufacturing plants generate substantial volume of solvents or hazardous waste and we are working towards reducing the same through process optimization and co-processing. We recycle almost 100% of the non-hazardous waste generated at our manufacturing sites. We are also in the process of converting wastelands into greenlands through afforestation.

