



There is a growing need for new chemically recycling technologies to complement the mechanical process once the plastic has been sorted into different waste streams. To effectively remove all the impurities from the plastic waste stream and effectively upcycle plastic into high end product, new improved chemical based recycling technologies are needed. These need to be more sustainable, produce less waste and have higher efficiencies than current widely used recycling technologies. Interesting companies like perPETual Technologies, Polygenta and Axens have developed next generation processes to address this. It was interesting to understand from Mr. Chetan Gandhi, CFO Polygenta Technologies Limited who discussed an interesting and unique chemical glycolysis recycling technology that they have implemented in Nashik site where they upcycle approx. 3.5 mn used PET bottles a day into high quality sustainable filament yarns.

There was a call for a widespread change needed in improving collection, sorting, segregation and logistics for e.g. intelligent conveyors with self-aligned robots and AGVs in material recovering activities. There are many start-ups like Active Biz Solutions who have taken-up this challenge with a view to making these more and more affordable for the MSME sector so it can be deployed on a larger scale.

A panel of industry stalwarts also discussed on the innovations and creations from recycled plastics. They said - startups are doing their part, all they need is sustained financial support. Moreover, mechanical recycling continues to dominate the Indian ecosystem of recycling of plastics where we need a combination of mech and chemical recycling both.

presently the recycling activities are in Silos. It is in a transformation phase.

People are slowly getting into systematic approach and digital information flow is almost well set.

However there is huge gap in high speed and sophisticated need and availability. We need change in our outlook in collection, sorting, segregation and logistics. We need intelligent conveyors with self aligned robots and AGVs in material recovering activities.

I have highlighted this in my presentation and I am happy to say that there are many start ups who have taken this challenge. Presently I am working on automation of MRF facilities with available indigenous technology.

In next few years we may be exporting such total solutions.

