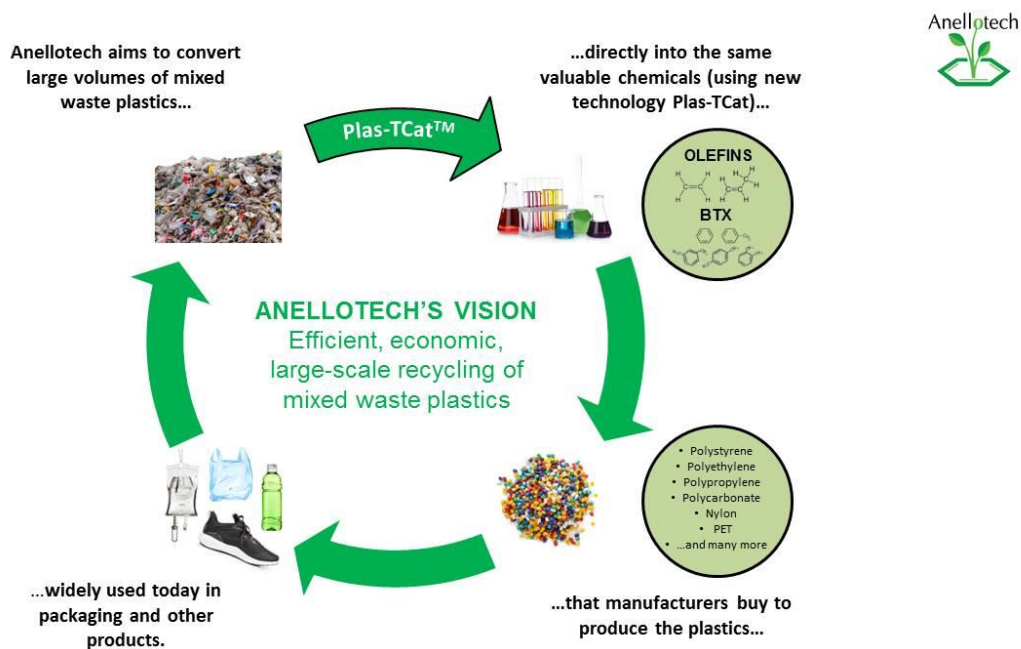




New Anellotech technology tackles plastics pollution by recycling plastic waste into chemicals

Pearl River, NY, USA, 6 December 2019 – Sustainable technology company Anellotech is significantly expanding its program with Plas-TCat™, a new process technology aiming to convert a wide range of plastic waste directly into chemicals – which can then be used to make new, virgin plastics.

95% of plastic packaging material is [annually lost to the economy after a single use](#) and often ends up in combustors, landfills or polluting the ocean. By leveraging Anellotech's existing Bio-TCat™ process – which converts biomass into bio-based chemicals and biofuels – Plas-TCat has demonstrated encouraging results in lab studies using pure plastics.



Plas-TCat has the potential to offer a new, cost-effective process which will recycle significant quantities of waste plastics directly into commodity chemicals. Once in the recycling system, waste plastics could be converted into commodity chemicals such as olefins, alkanes and aromatic chemicals, which are identical to their petro-based counterparts which are currently used by manufacturers to make virgin plastics.

Anellotech wants to develop Plas-TCat so it could convert the majority of plastic materials used today, including composite films. Anellotech aims to use its Bio-TCat lab and TCat-8® pilot systems to feed in plastics waste, eventually developing and designing a commercial plant to efficiently make commodity chemicals at large scale, using the same basic process configuration.

Anellotech has expanded its development program, which is expected to last several years. The company has planned studies to ensure that the Plas-TCat process is robust and capable of running long term, on a range of real-world waste plastics feedstocks, with all the impurities that come with them. Anellotech's TCat-8 pilot plant extensively ran 24/7 with biomass and the company expects it to do the same with plastics.

“Plas-TCat has the potential to transform plastic waste such as composite films, mixed plastics and plastics with biomass – such as paper labels – directly into valuable chemicals. It can handle oxygenated polymers, an important advantage over pyrolysis processes that produce complex oil mixtures which require upgrading and additional conversion in steam crackers,” said David Sudolsky, President and CEO of Anellotech. “With potentially high yields of valuable products, we are keen to use Plas-TCat in areas where plastic waste collection is not enforced and collection infrastructure to isolate waste plastics streams is currently lacking. By allowing payment for waste plastic, Plas-TCat provides economic incentives to tackle plastics pollution, especially in developing countries where much of the ocean plastic pollution originates. We are excited about this new venture and are seeking engagement with knowledgeable strategic partners to provide development funding, as well as knowledge in waste plastics supply chain and mechanical handling, to help accelerate this project.”



About Anellotech

Anellotech (<http://www.anellotech.com>) is a sustainable technology company focused on commercializing innovative production of cost-competitive renewable chemicals and fuels from non-food biomass. Founded in 2008, Anellotech has raised US\$85 million in cash and in-kind contributions from strategic partners. Its patented Bio-TCat™ technology is an efficient thermal catalytic process for converting biomass into BTX aromatics (a mixture of benzene, toluene and xylene) which are chemically identical to petroleum-based counterparts. High purity benzene, toluene and xylenes are used to make commodity polymers such as polyester (polyethylene terephthalate or “PET”), polystyrenes, polycarbonates, nylons and polyurethanes which are used to manufacture plastic consumer goods such as beverage bottles, food packaging, clothing, footwear, carpeting, automotive and electronic components.

Bio-TCat™ technology can also produce renewable AnelloMate™ fuel blendstocks which can be used to lower the GHG emissions of producing gasoline, jet fuel, diesel, and low-sulphur marine fuels. The Bio-TCat™ process has already been demonstrated with loblolly pine feedstocks at Anellotech’s TCat-8® pilot plant in Silsbee, Texas. This platform is now also being leveraged for Plas-TCat™, a development stage process technology aiming to convert mixed waste plastics into chemicals and fuels. Engineering work to design the first commercial plant is underway by Anellotech and its R&D, engineering and licensing partners IFPEN and Axens.

For further information contact:

David Sudolsky
Anellotech Inc.
+1 (845) 735 7700
DSudolsky@anellotech.com

Barbara Mendes-Jorge
Sustainability Consult
+32 485 92 05 81
bmj@sustainabilityconsult.com