\Trine Tech is a bio-resource technology startup that is being incubated in the Roar Nigeria Startup Incubator, University of Nigeria Nsukka

We are utilizing bioresource materials like cassava peels, kitchen waste, cow dung to generate biogas and organic fertilizer through the process of anaerobic digestion, using bio-recyclers. In the long run, we hope to use this renewable source of energy to produce bio-fuel that will power gas engines and generate electricity. thereby directly addressing the Sustainable Development Goals 3, 7, 11, 13, 15 and 17 which are good health and well being, affordable and clean energy, sustainable cities and communities, climate action, life on land, and partnerships for goals, respectively.

**W**e partnered with the National energy research and development centers, University of Nigeria Nsukka where we gained access to guidance and mentorship on how to go about our research and prototype building. This is how it works. The allocation of different elements into the bio-recycler is divided into three, 25% free space, 25% waste and 50% water. All these elements are combined and imputed into the airtight digester that undergoes the process of “anaerobic digestion” to produce biogas and the rich nutrient digestate can also be used as fertilizer is more eco-friendly when compared to conventional chemical fertilizers