LanzaTech has commercialized its gas fermentation platform, after a decade of rigorous scale up and multiple plants in the field. With this experience in industrial waste gases, municipal solid waste (MSW)- and biomass-derived syngas, LanzaTech is now poised to deploy its carbon recycling platform across an array of waste feedstocks for production of fuels and everyday chemicals. This talk will expand on this experience, the lessons learned and successes along the way.