



Keynote Session	Leading Pilot Facilities for the Bioeconomy (Pilots4U)
Title	Metrosert Biorefinery – Estonia’s New Hub for Bioprocess Scale-Up
Company	Metrosert AS
Speaker	Karl Peebo, Business Development Manager
Keywords feedstock (max 2)	sugars, lignocellulosics
Keywords technology (max 2)	fermentation, downstream processing
Keywords End-Product (max 2)	food, biomass
Abstract:	
Metrosert is establishing a state-of-the-art biorefinery pilot facility in Tallinn, Estonia, to accelerate the scale-up of sustainable bioprocesses in Northern Europe. With fermentation capacity from 50 L to 5000 L and advanced downstream processing—including separation, filtration, concentration, and drying—we enable small-batch, food-grade production of starter cultures, enzymes, proteins, functional biomass fractions, and bioplastics. The facility is equipped to handle genetically modified organisms under controlled conditions and has capacity and access to industrial lignocellulosic feedstocks, providing a strong platform for developing next-generation processes with high market relevance. As a CDMO, Metrosert supports applied research, experimental development, and business consulting, bridging the gap between laboratory innovation and semi-industrial scale. Backed by its role as Estonia’s central metrology office, Metrosert ensures process reliability, quality control, and regulatory compliance. Beyond infrastructure, Metrosert serves as the first contact point and networking hub for the Estonian biobased industry, connecting start-ups, SMEs, corporates, and research institutions. With the Biorefining Unit, Estonia positions itself as a growing hub for applied bioinnovation, offering expertise, infrastructure, and partnerships to advance the European bioeconomy.	