



RAVITA™

Innovative nutrient recovery from wastewater

**4th Phosphorus in Europe Research Meeting
(PERM) - 2 June 2021**

Kati Blomberg
Project Engineer
Helsinki Region Environmental Services Authority

WHAT IS RAVITA™?

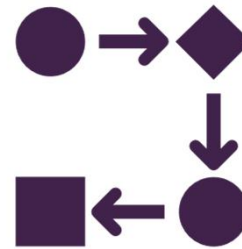


Since 2015 HSY has been developing nutrient recovery process called RAVITA™

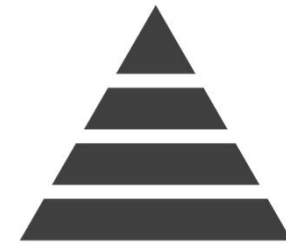


Phosphorous from the wastewater as phosphoric acid

Can be furthermore processed into Ammonium phosphate

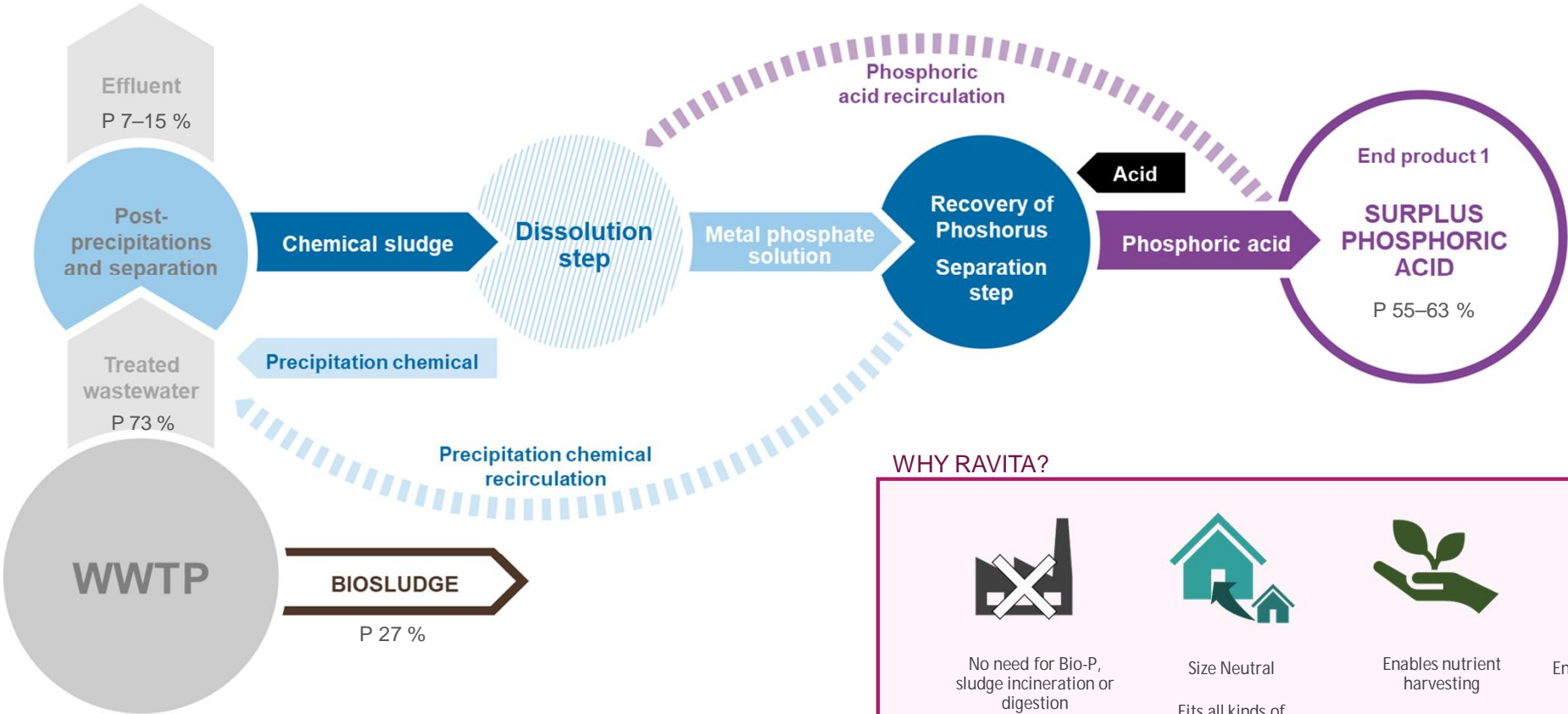


Technical readiness level 5-6 (max 9)



2019 à RAVITA™ DEMO plant 1000 PE

BASICS OF RAVITA PROCESS



WHY RAVITA?

<p>No need for Bio-P, sludge incineration or digestion</p> <p>Nutrients are not integrated to the raw or biological sludge</p>	<p>Size Neutral</p> <p>Fits all kinds of WWTPs</p>	<p>Enables nutrient harvesting</p> <p>Maximizes phosphorus recovery (> 60 %)</p>	<p>Enables precipitation chemical circulation</p>