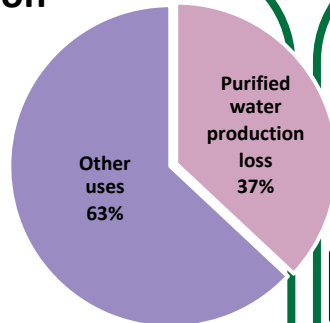
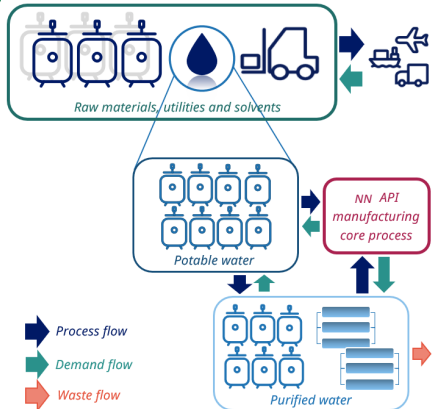
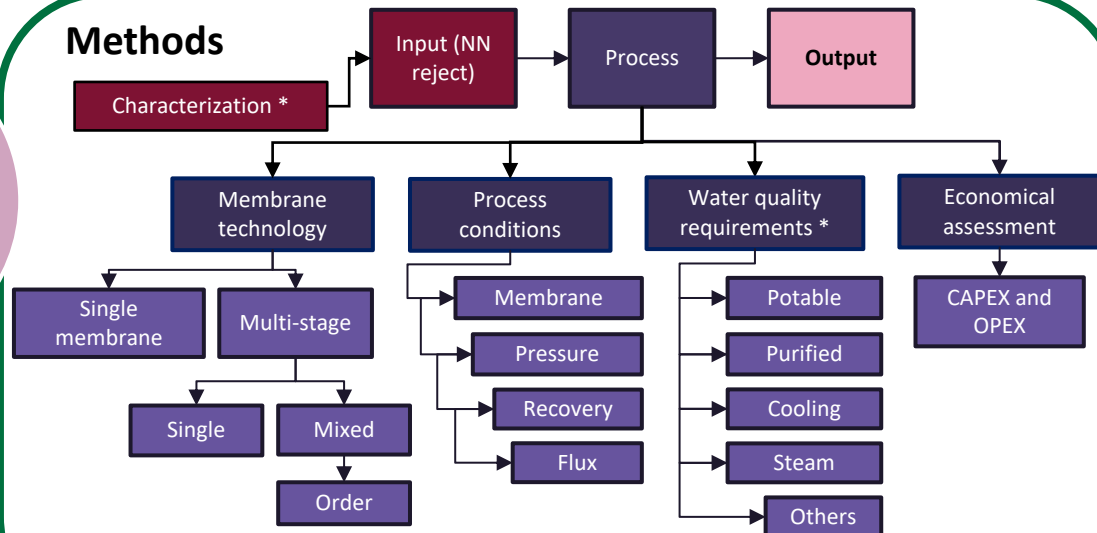


Introduction



- Objective:** Techno-economical assessment for wastewater treatment and recycling to provide a cost-effective source of clean water and address water scarcity.

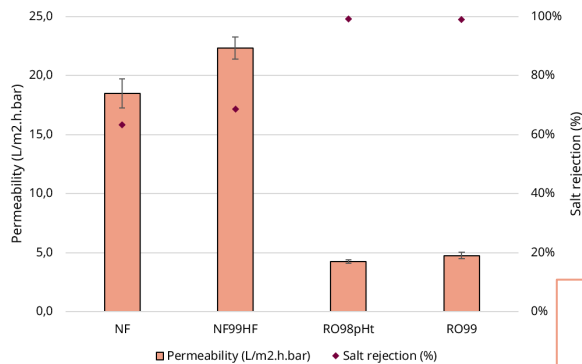
Methods



*Metrics: Conductivity, Π , TOC, nitrates, hardness, pH, heavy metals, CFU, endotoxins

Membrane screening

4 membranes, 4 pressures

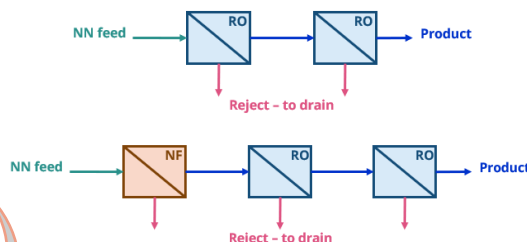


No differences between P; significant differences among same-tech membranes

Results

Combinations screening

1, 2 and 3 stages (Total 10 cases)



- Capacity analysis
- Recirculation prediction
- Membrane stability to different feed characteristics

Perspectives

- Choose the best combinations for economic feasibility analysis
- Possibility to reclaim water and recycle it in different steps of the process

Parameter	Potable water	RO water	Purified water
TOC (ppm)	≤5,3	≤0,5	<0,25
Conductivity (μS/cm)	N/A	≤20	≤1,3