

1. Why this project?

Reverse Osmosis (RO) key to recovering wastewater streams

Build up a **digital twin** to conduct studies and tests to...

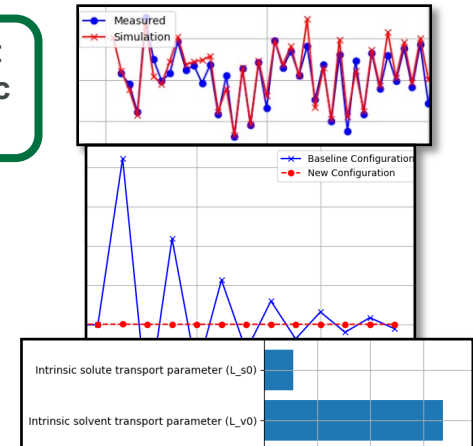
...boost throughput and efficiency. Improve system's **sustainability**

3. Outcomes

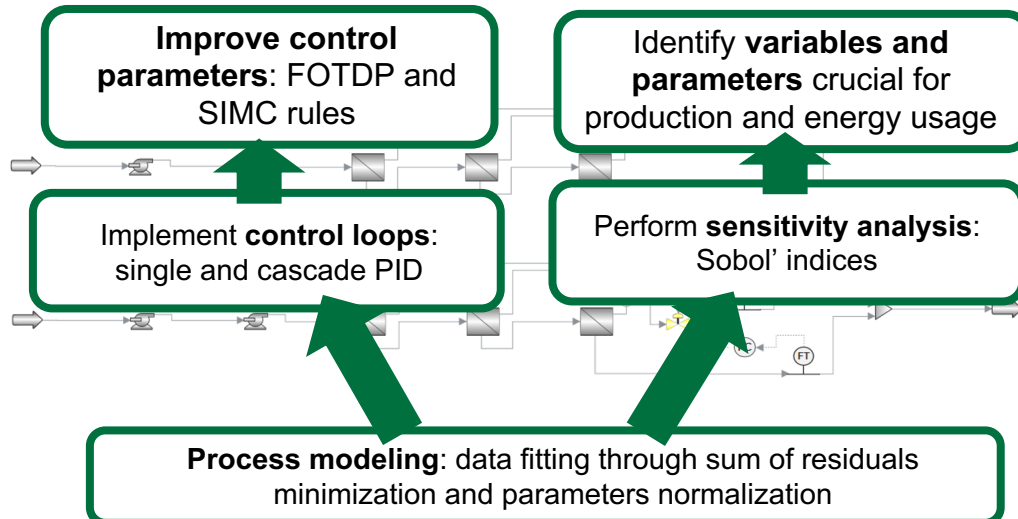
RO mechanistic model fitted with plant data: **parameters estimated with good dynamic predictions**

Implemented PI control schemes: **improved response to disturbances**

Key **parameters for production identified** through Sobol's indices



2. Methods



4. Perspectives

- **Community** events and social projects
- **Networking** with industry and academia
- Exposure to diverse **cultures**

- **Model to aid** future optimizations, layouts changes and production support
- **Model expansion required** to enhance accuracy and practical relevance