

ENCONTRO EFS 22

ALUNOS ♦ EMPRESAS

Full integration of water and energy nexus in water supply systems

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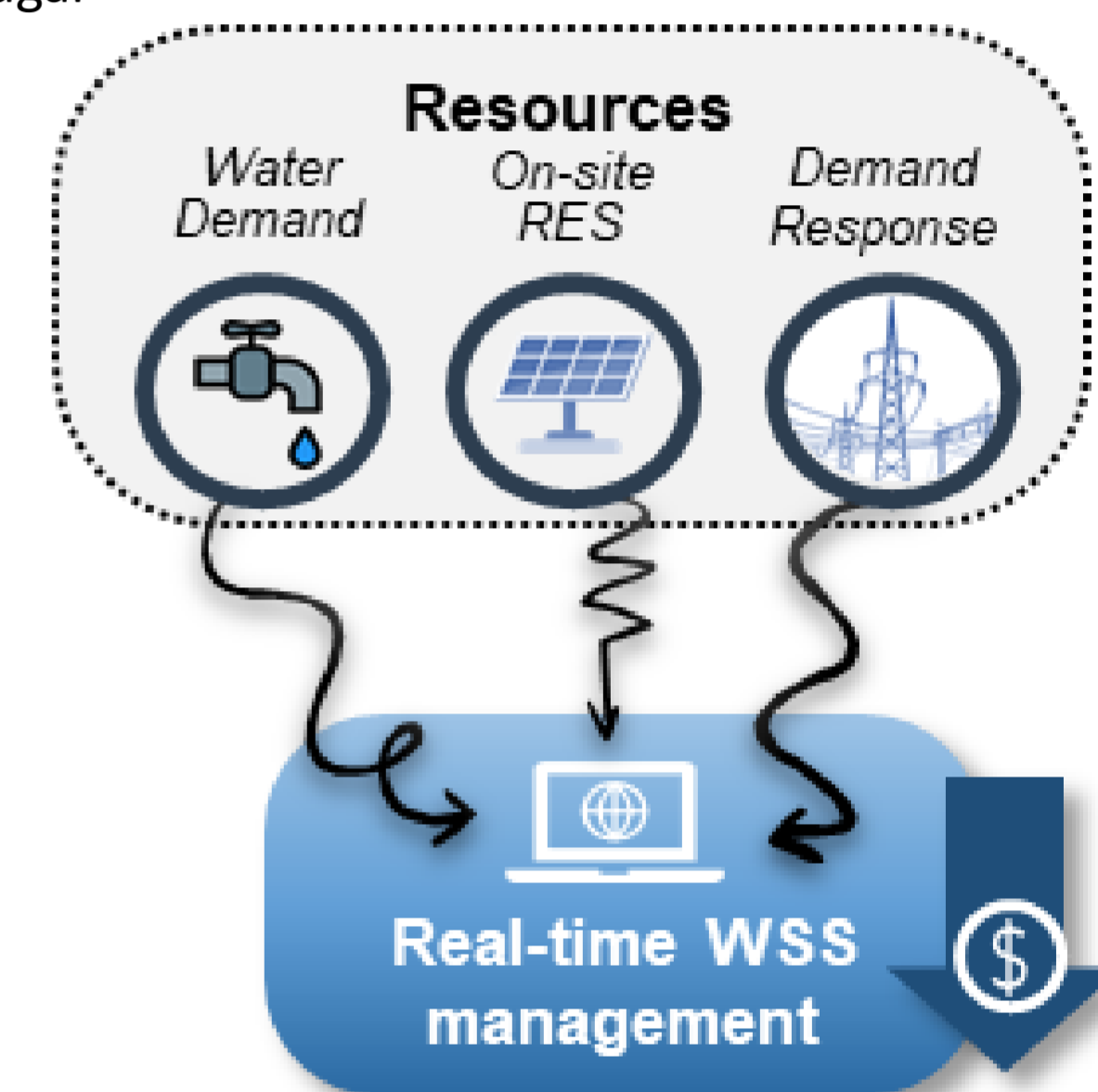


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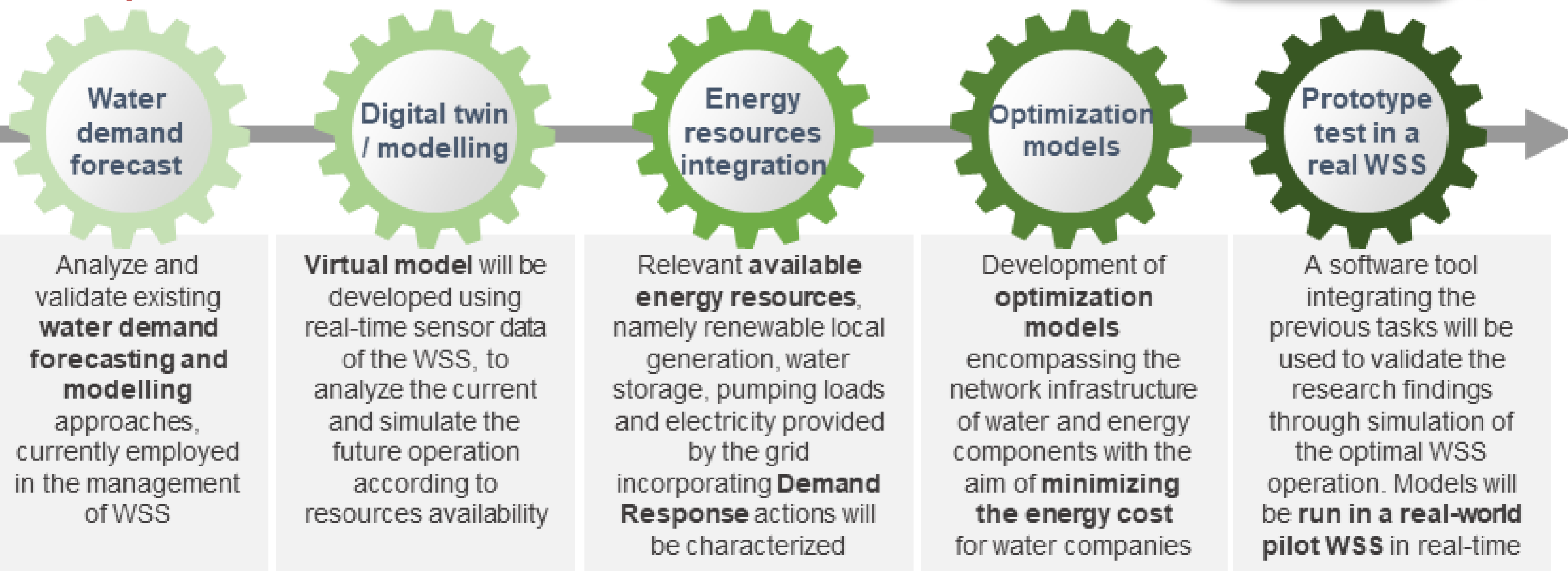
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Objectives

- 1 Promoting the **cost-efficiency water-energy operation** of WSS by optimize the integrated management of the available resources
- 2 Assessing the **potential application of Demand Response** actions to water utilities, especially:
 - dynamic electricity pricing tariffs
 - incentive-based (e.g., participation in energy markets as the Electricity Market Regulation Reserve)



Work plan



Expected Outcomes:

- Providing an **easy-to-use decision support tool** to improve the overall WSS efficiency operation management
- **Reducing the GHG emissions** promoting on-site renewable production in water facilities
- **Minimizing the energy bill** of the water utilities by integrating energy resources available
- Demonstrating that **WSS are suitable candidates to implement Demand Response** programs and could create a great opportunity to provide power systems' stability, reliability and economic benefits