

# WATER EMPOWERMENT

by

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บริษัท อินโนเวชั่น เทคโนโลยี จำกัด  
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# Why Water Empowerment?



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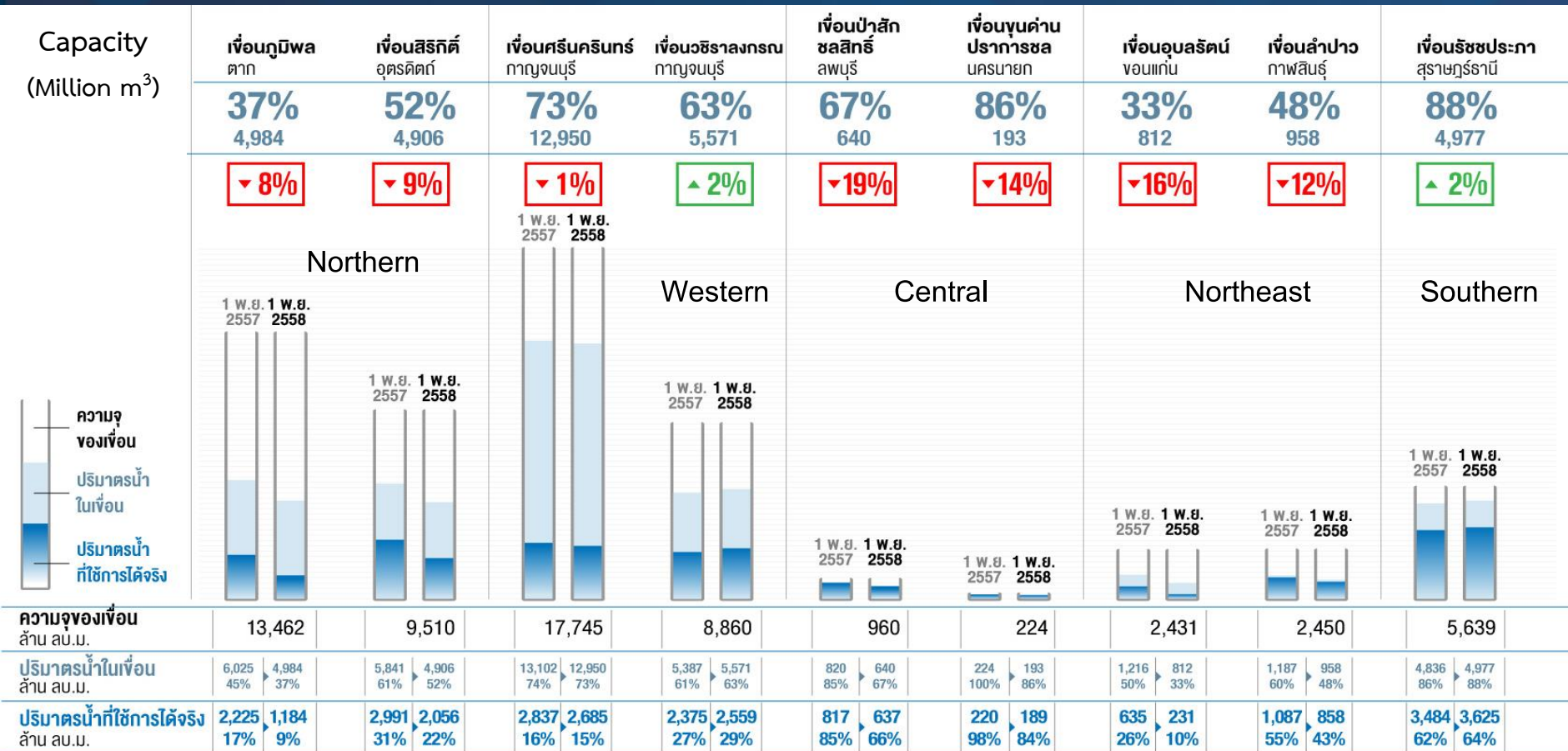


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# Water Crisis in 2015



ประเทศไทย



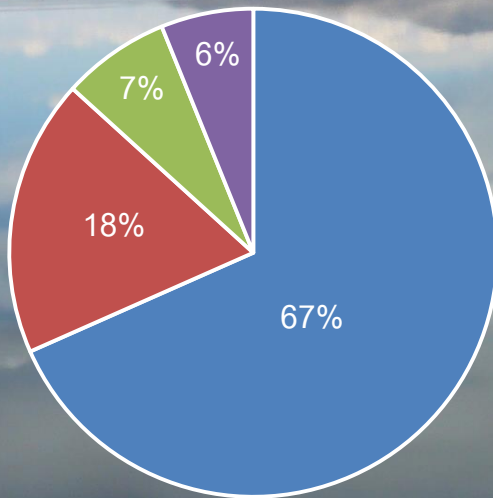
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# Wastewater Source

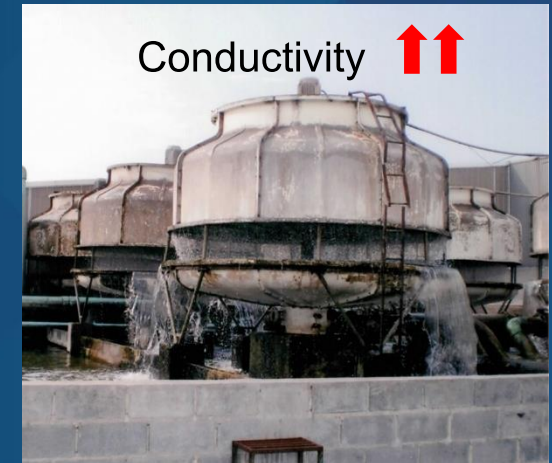
Wastewater Source in each sector



■ Residential ■ Agricultural ■ Hotel ■ Other

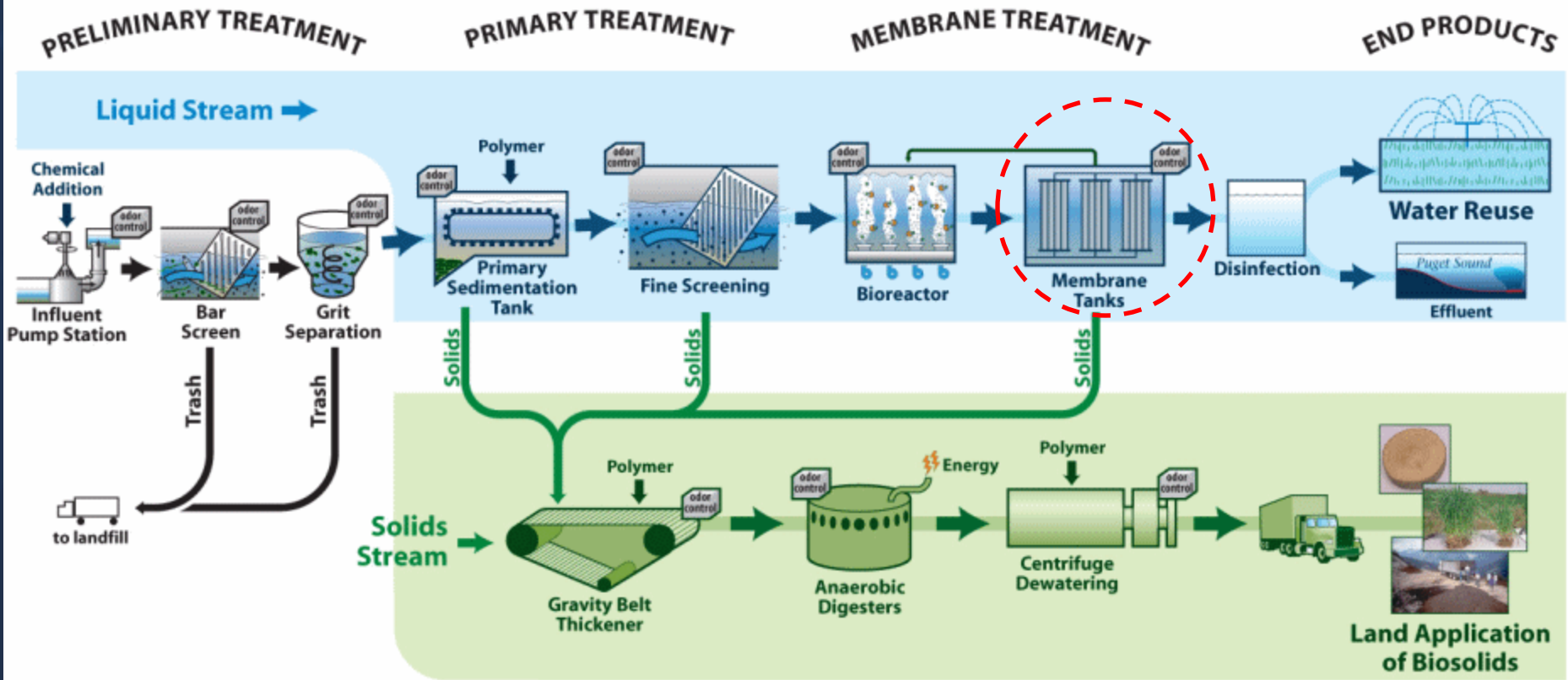


# Hotel Wastewater Source



# Wastewater Treatment

## Advanced System



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# Return of Investment (ROI)

## Case I

### Source reduction (minimize influent)

- Reuse wastewater from swimming pool and Cooling tower

### Benefit

- Wastewater treatment can be reduced (save up to ↓ 15%)
- Low energy consumption for pumping and air blower (save energy up to ↓ 20%)
- In case of new system, can reduce treatment area (decrease ↓ 10%)

# Return of Investment (ROI)

## Case II

### Quality management

- All wastewater treated in treatment system

### Benefit

- Low cost of water treatment system (can save investment cost ↓ 20% - 30%)



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# Return of Investment (ROI)

Description	Case I	Case II
Technology	<ul style="list-style-type: none"><li>- Ozone</li><li>- Ultra Filtration (UF)</li><li>- Chemical treatment system</li></ul>	<ul style="list-style-type: none"><li>- UV</li><li>- Reverse Osmosis</li><li>- Disinfection</li></ul>
- Investment cost	- 500k to 1 million	- 300k to 500k
- Payback period	- 2 to 3 years up to sizing of system	- 1.5 to 3 years up to sizing of system



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