



Porosys

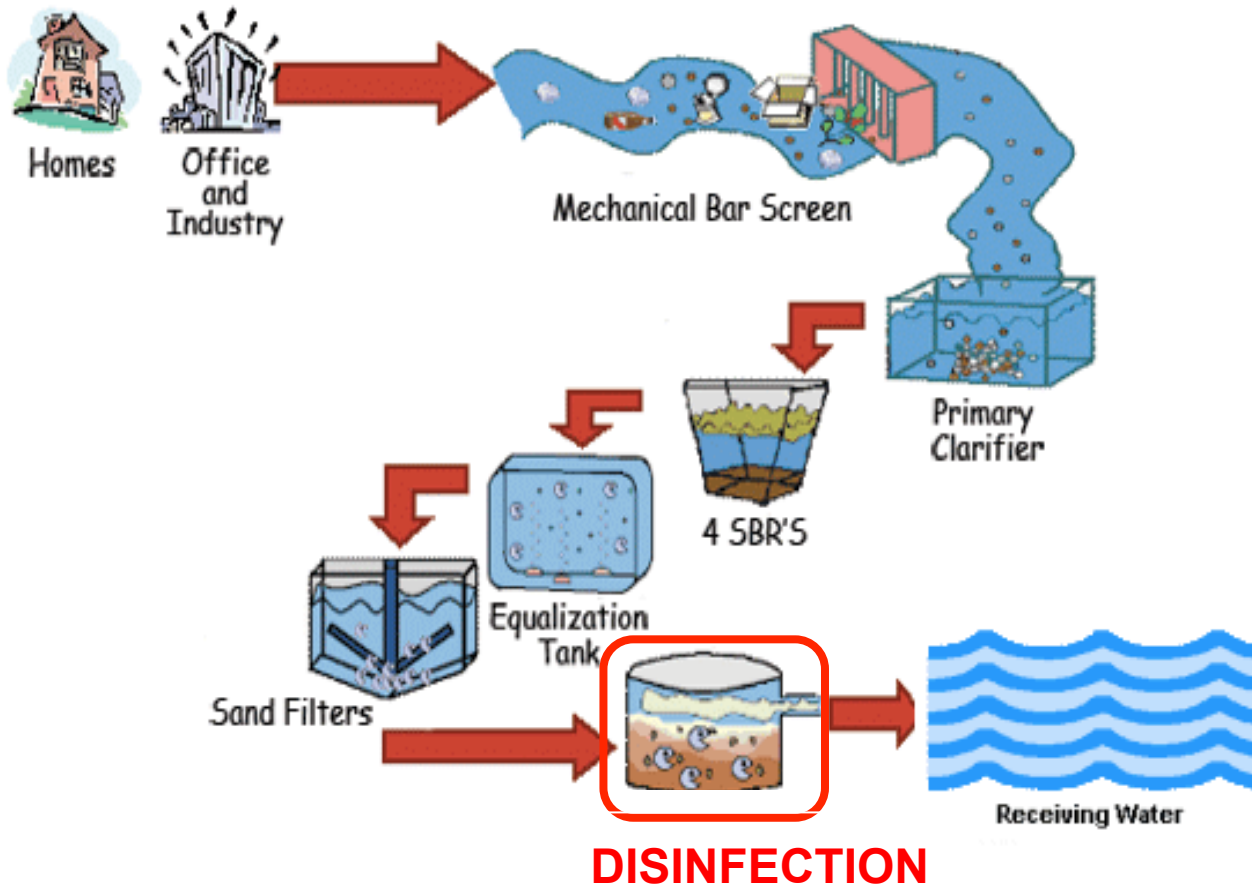
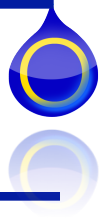
A new way to disinfect wastewater.



# >\$2B per year on Wastewater Disinfection

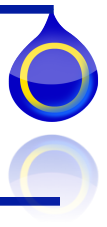


# Wastewater Treatment Plant

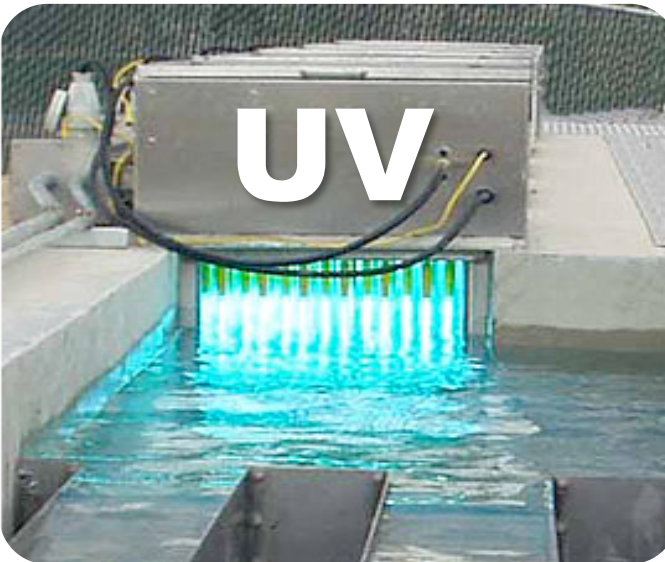




# Existing Solutions



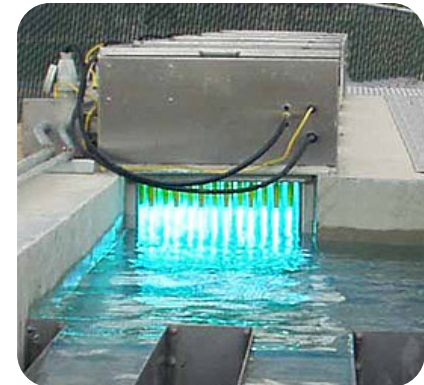
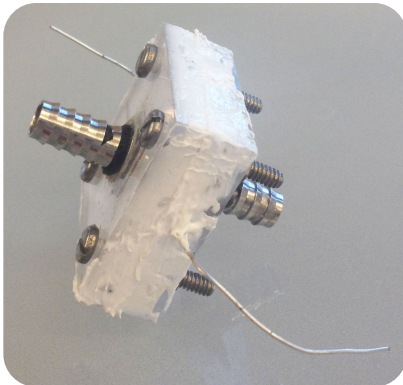
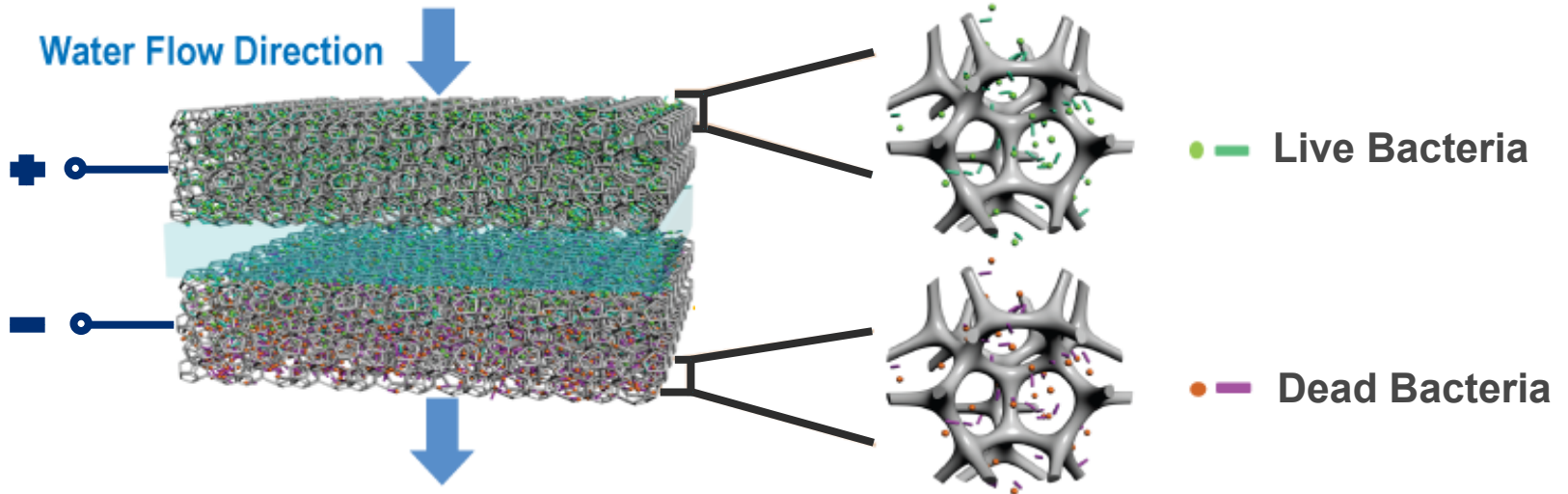
- toxic by-products
- safety risks
- extra dechlorination step → 50% extra cost



- capital intensive
- high energy consumption
- high maintenance
- additional pre-treatment steps

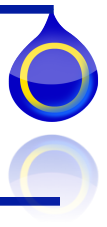


# Our Solution: NanoSponge





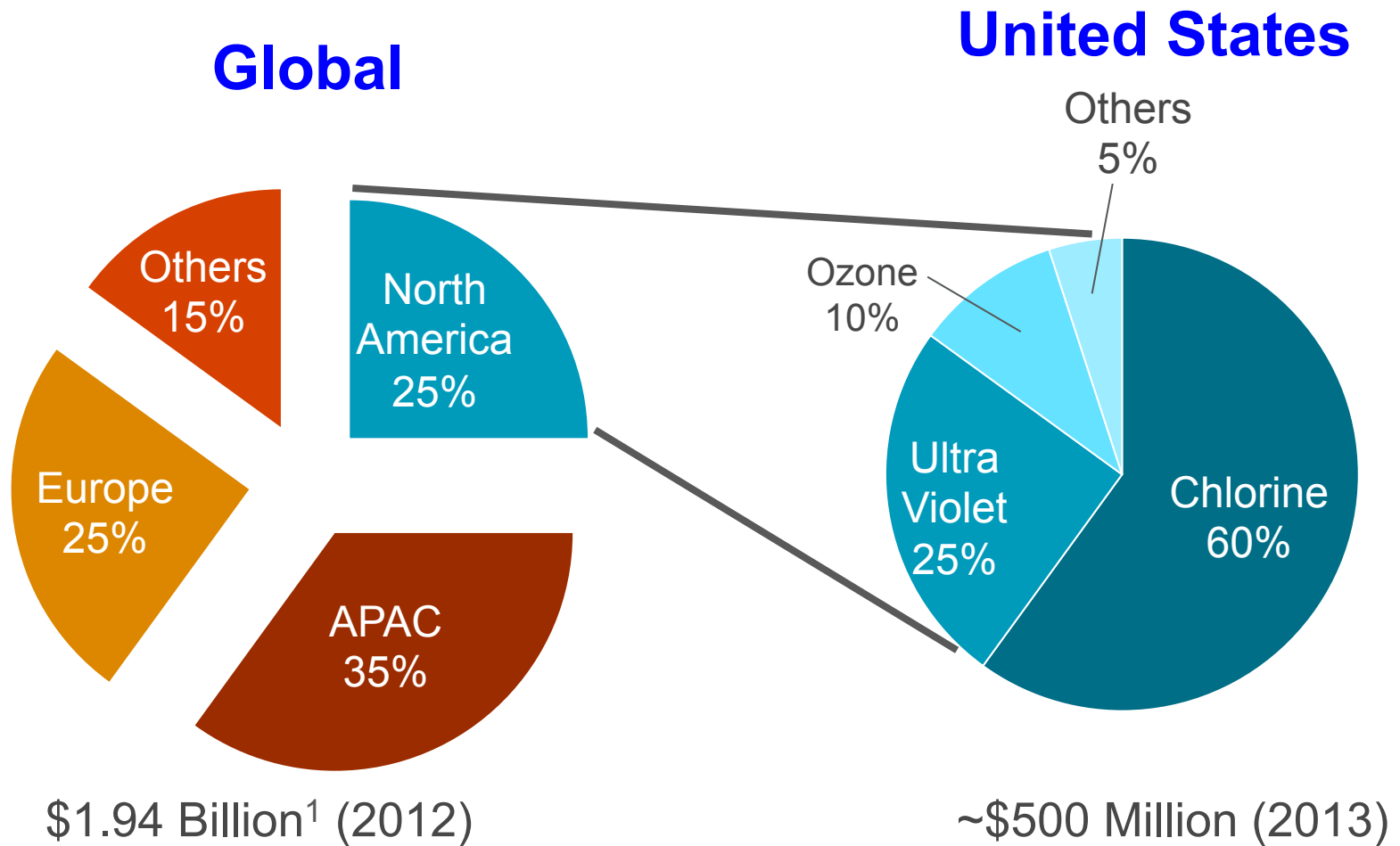
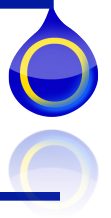
# Current Solutions vs. PoroSys



Consideration	Chlorine	UV rays	PoroSys
Disinfection Efficacy	✓	✓✓	✓✓✓
High Speed	✓	✓✓	✓✓✓
Safety	✓	✓✓	✓✓✓
Sensitivity to Water Quality	✓✓✓	✓	✓✓
Hazardous byproducts	✗	✓✓✓	✓✓✓
Low Power	✗	✓	✓✓✓
Low Cost	✗	✓	✓✓✓



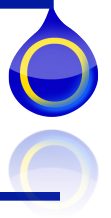
# Market Breakdown



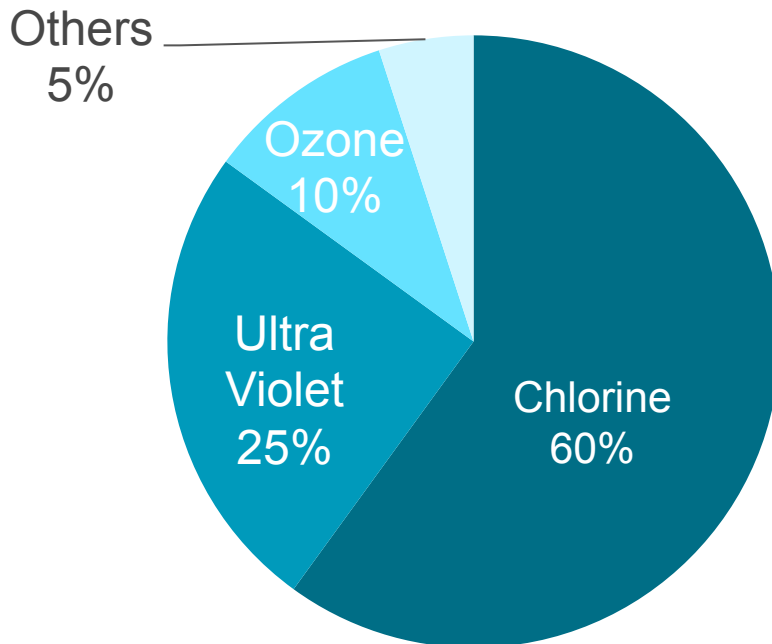
<sup>1</sup>Frost and Sullivan



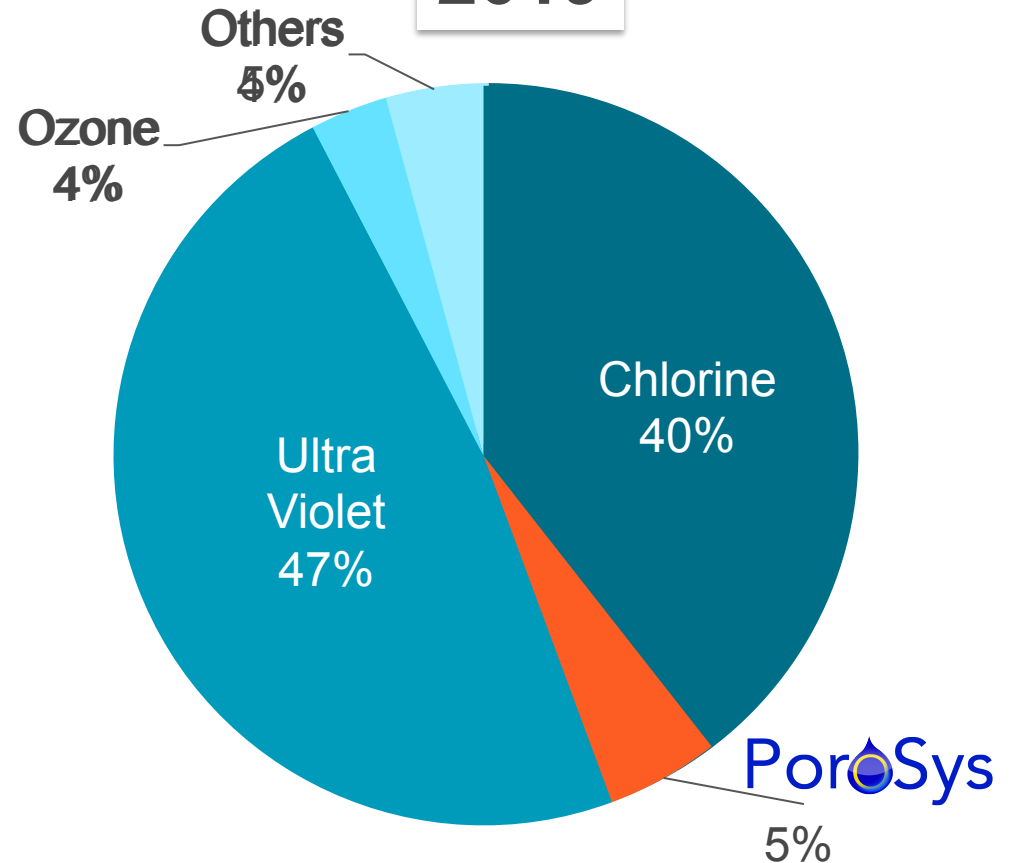
# US Market Growth Analysis



2013



2019



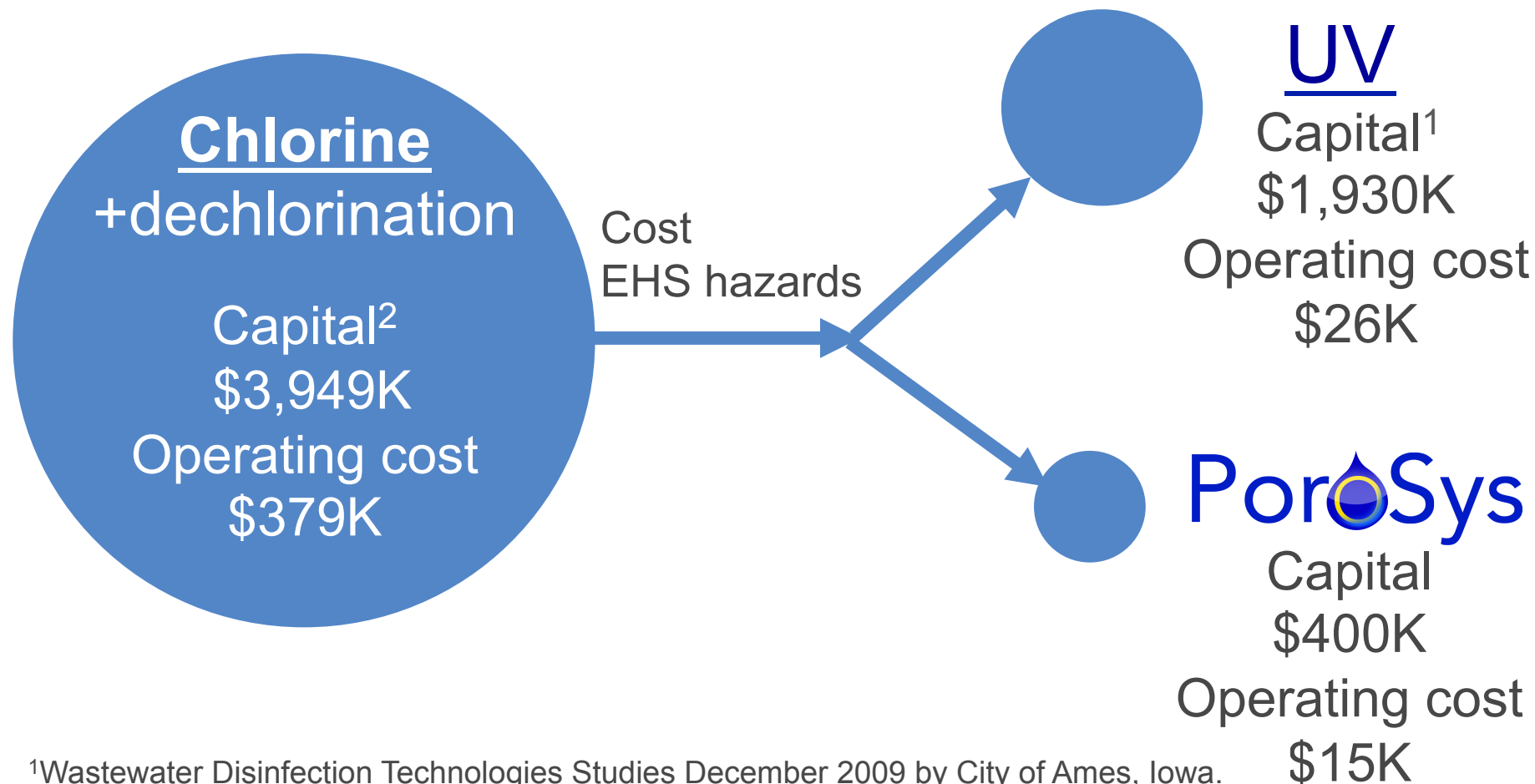
~\$500M

CAGR = +6.0%

~\$709M

# Business Model

For a plant treating 20 million gallons a day

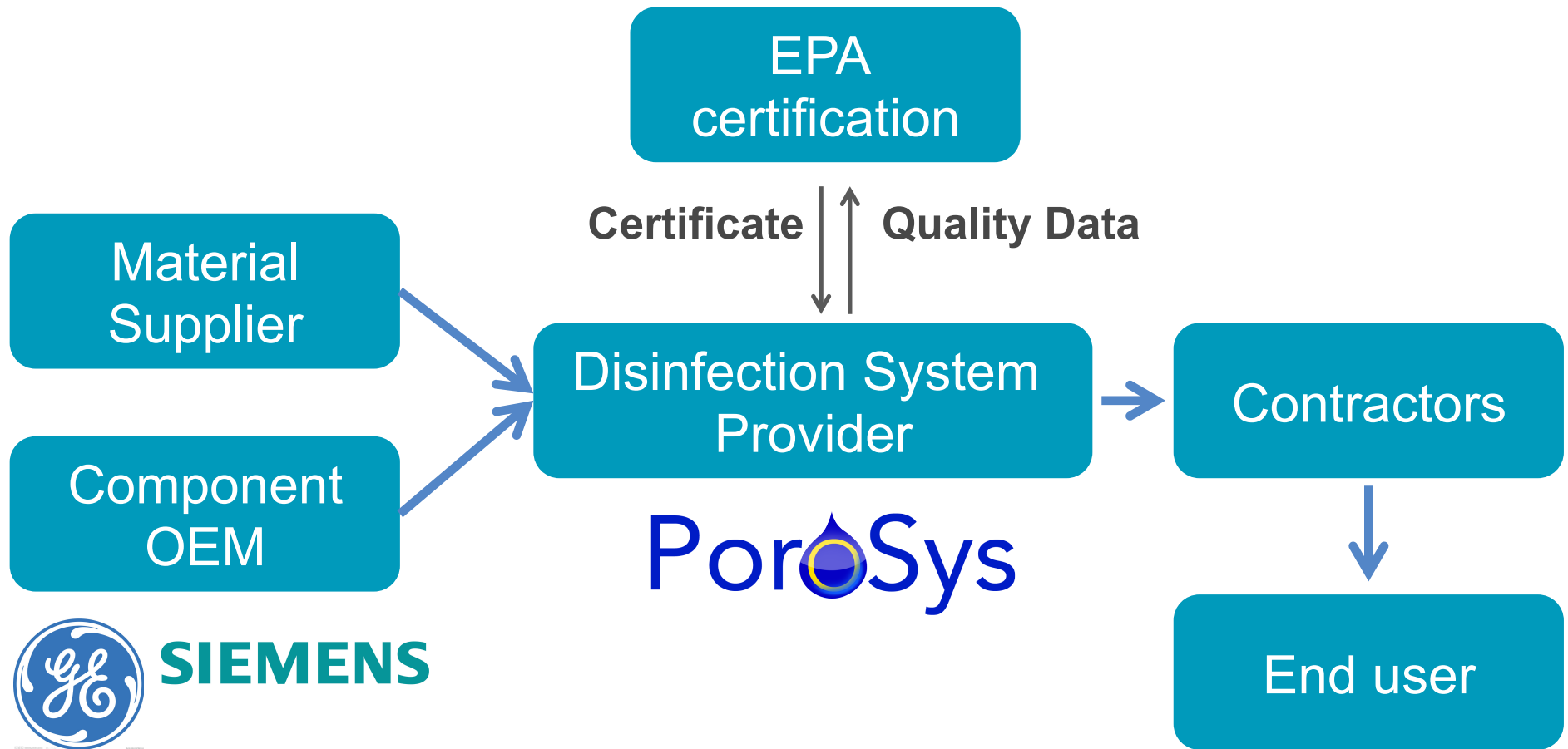
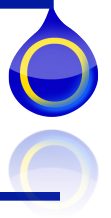


<sup>1</sup>Wastewater Disinfection Technologies Studies December 2009 by City of Ames, Iowa.

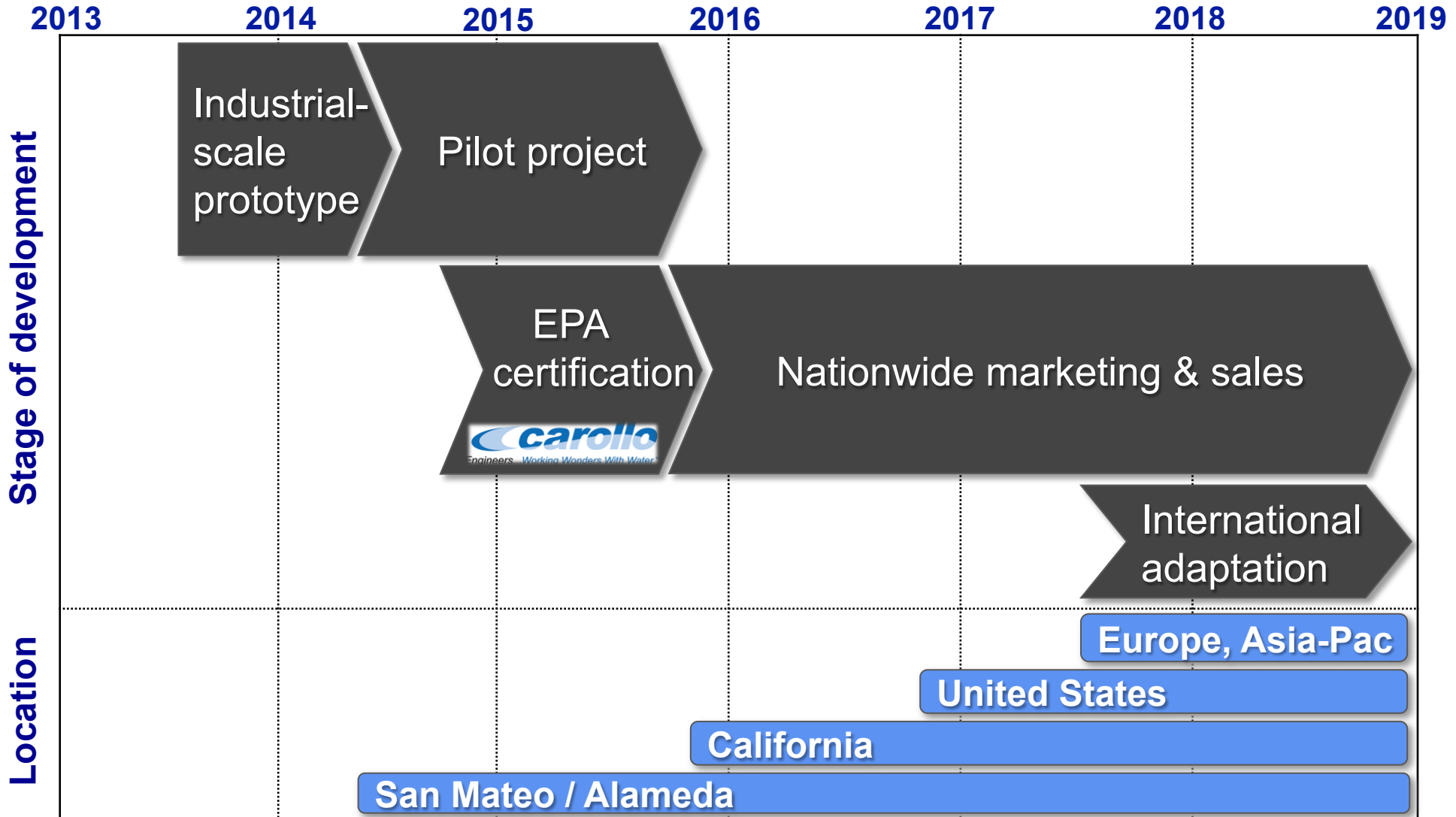
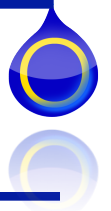
<sup>2</sup>EPA Wastewater Technology Fact Sheet: Chlorine Disinfection.



# Value Chain

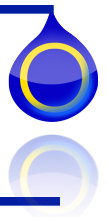


# Go-to-market Strategy



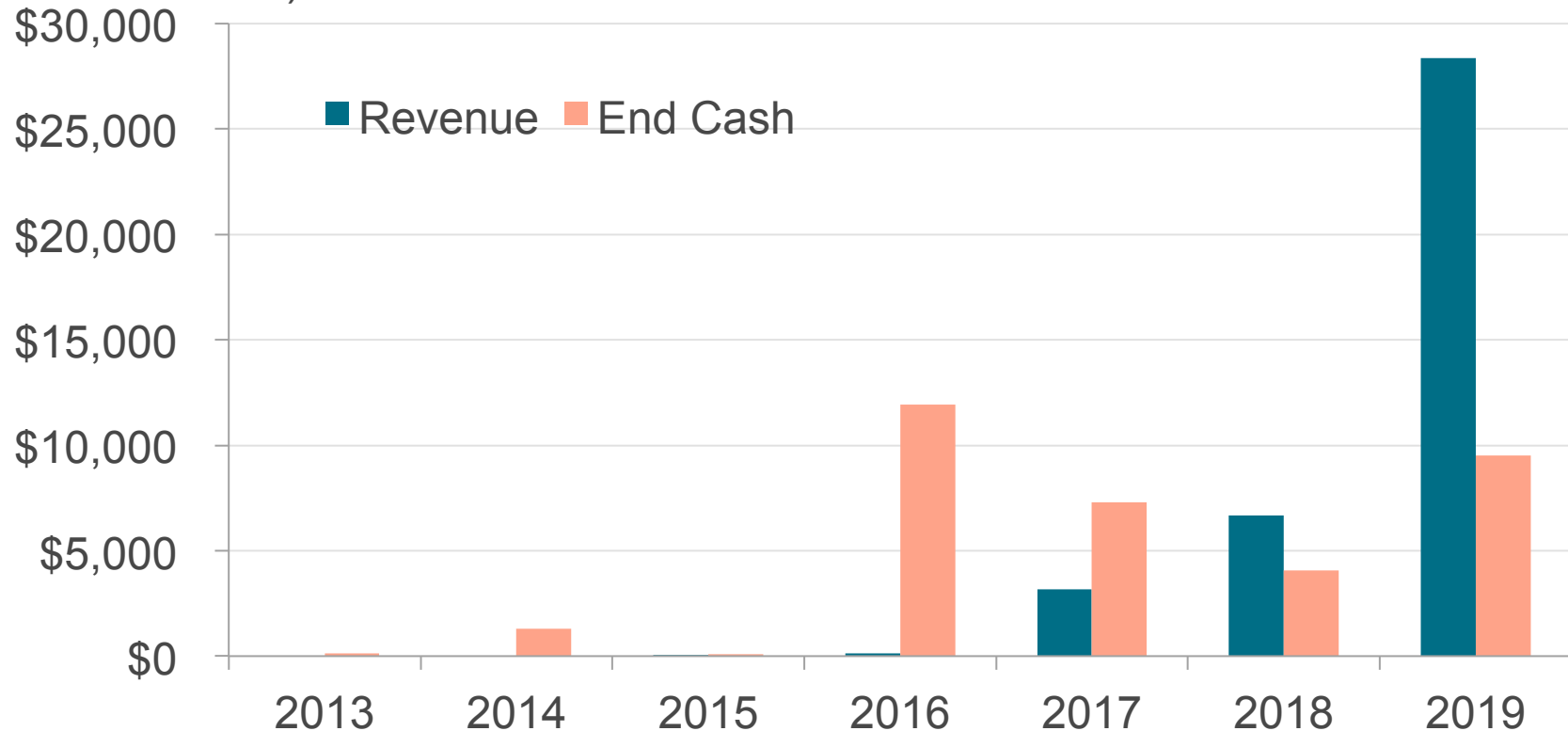


# Finance Summary and Financing

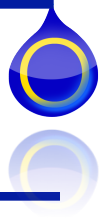


	Seed	Series A	Series B
<b>Amount / Date</b>	<b>\$<u>500K</u> / Aug 2013</b>	<b>\$<u>2M</u> / Aug 2014</b>	<b>\$<u>15M</u> / Aug 2016</b>
<b>Achievements</b>	<ul style="list-style-type: none"> <li>• Large Scale Prototype</li> </ul>	<ul style="list-style-type: none"> <li>• Pilot Wastewater Plants</li> <li>• Complete System</li> <li>• Pre-Valuation: <b>\$4.5M</b></li> </ul>	<ul style="list-style-type: none"> <li>• Large Wastewater Plants</li> <li>• Pre-Valuation: <b>\$28.5M</b></li> </ul>

(\$ in thousands)



# Founding Team Members



Juanri, MS

Materials  
Engineering

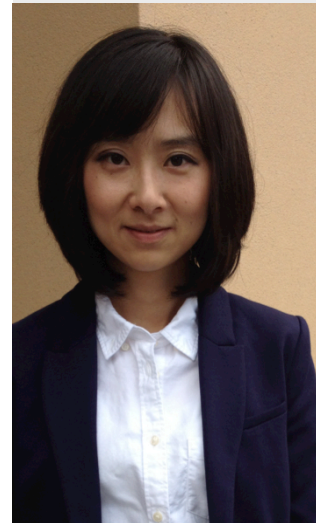


Lorenzo  
Mangubat, MS

Materials  
Engineering



Charles  
de Bourcy,  
PhD candidate  
Applied  
Physics



Vivian  
Wang, PhD  
candidate  
Electrical  
Engineering



Maryam  
Ziaei, PhD  
Electrical  
Engineering



Jae Hyung  
Lee, PhD  
Electrical  
Engineering



Dr. Yi Cui  
Assoc. Prof. at  
Stanford  
University





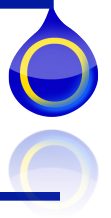


Porosys

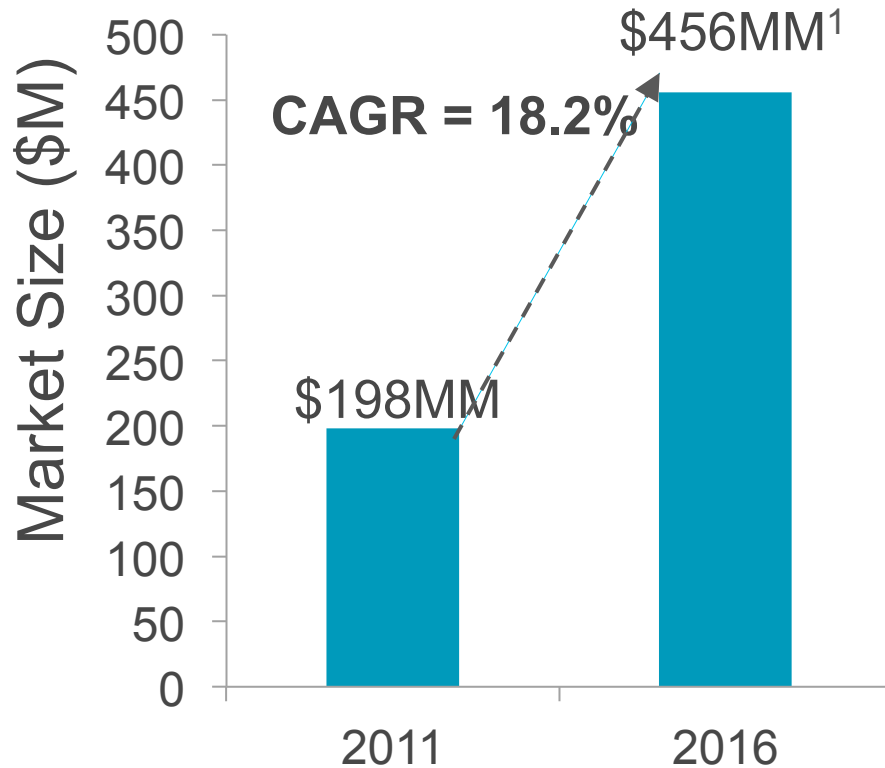
A new way to disinfect wastewater.



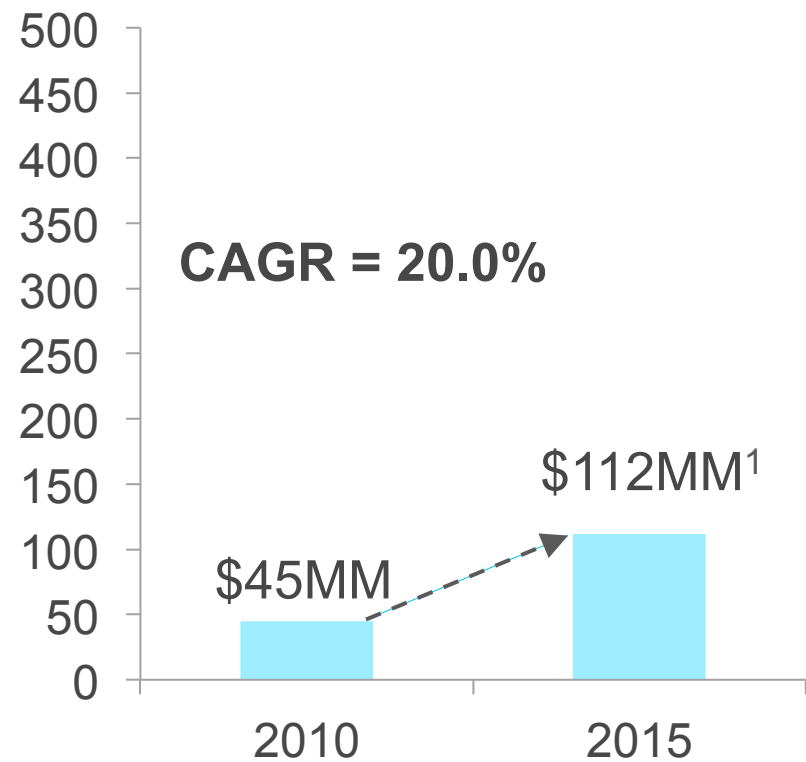
# Market Growth Trend



UV wastewater disinfection equipment



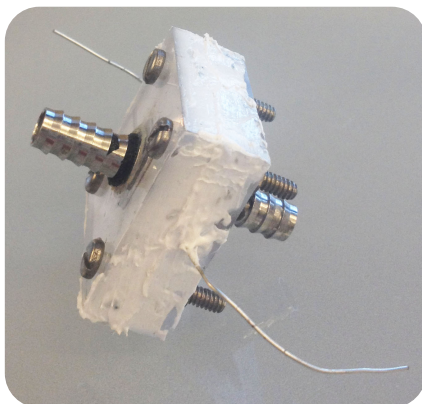
Nanotech water disinfection equipment



<sup>1</sup>BCC Research

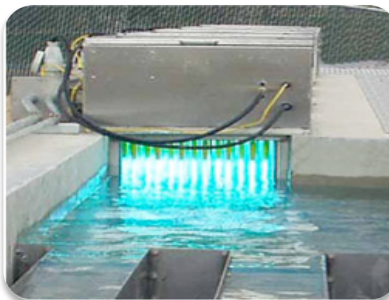


# Risks



## Technology

- Prove pilot scale, large scale
- May not be low-cost



## Adoption

- Race against UV systems

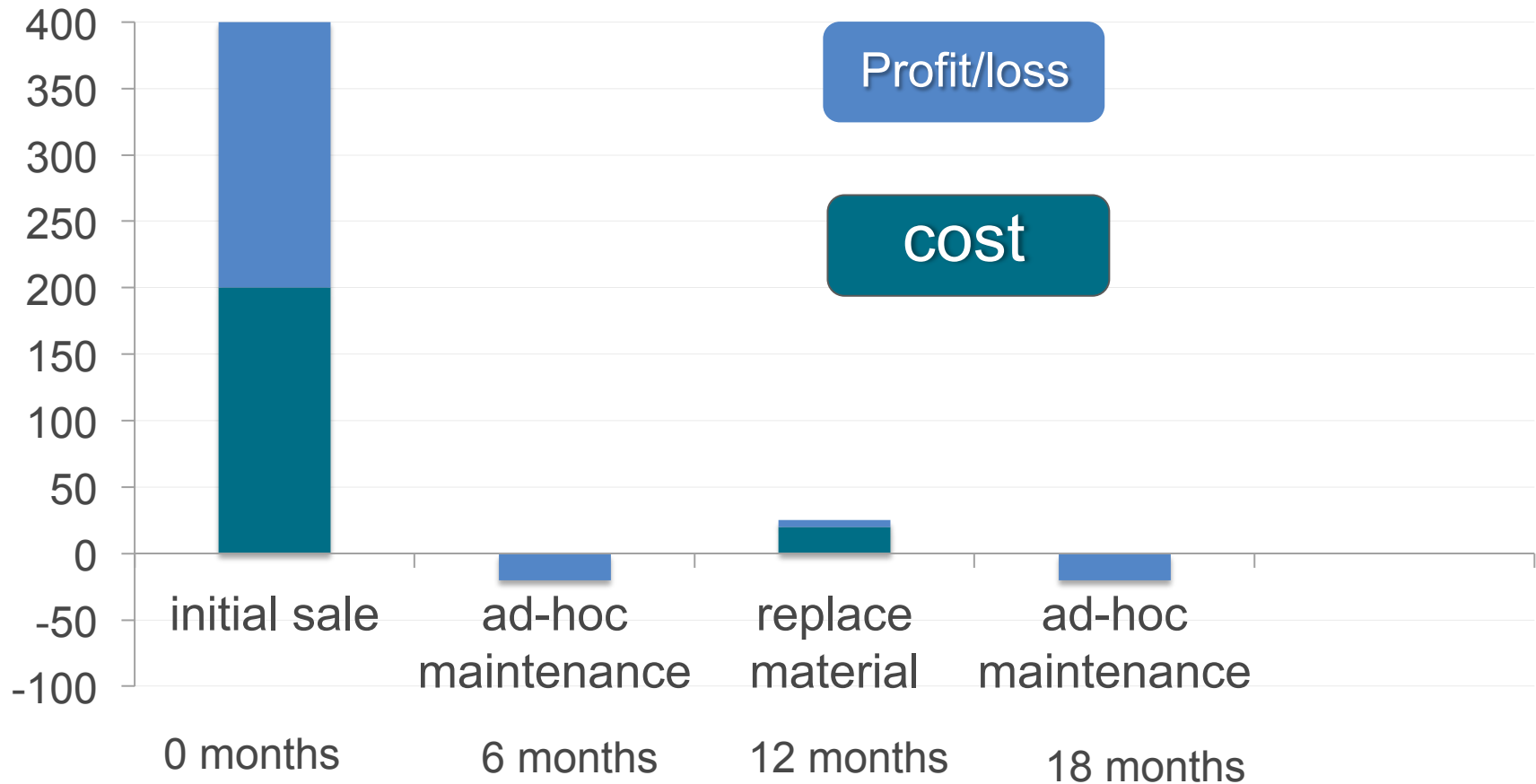


## Regulation

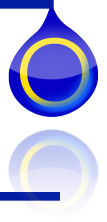
- May be slow
- May not certify

# Cash Flow per Solution

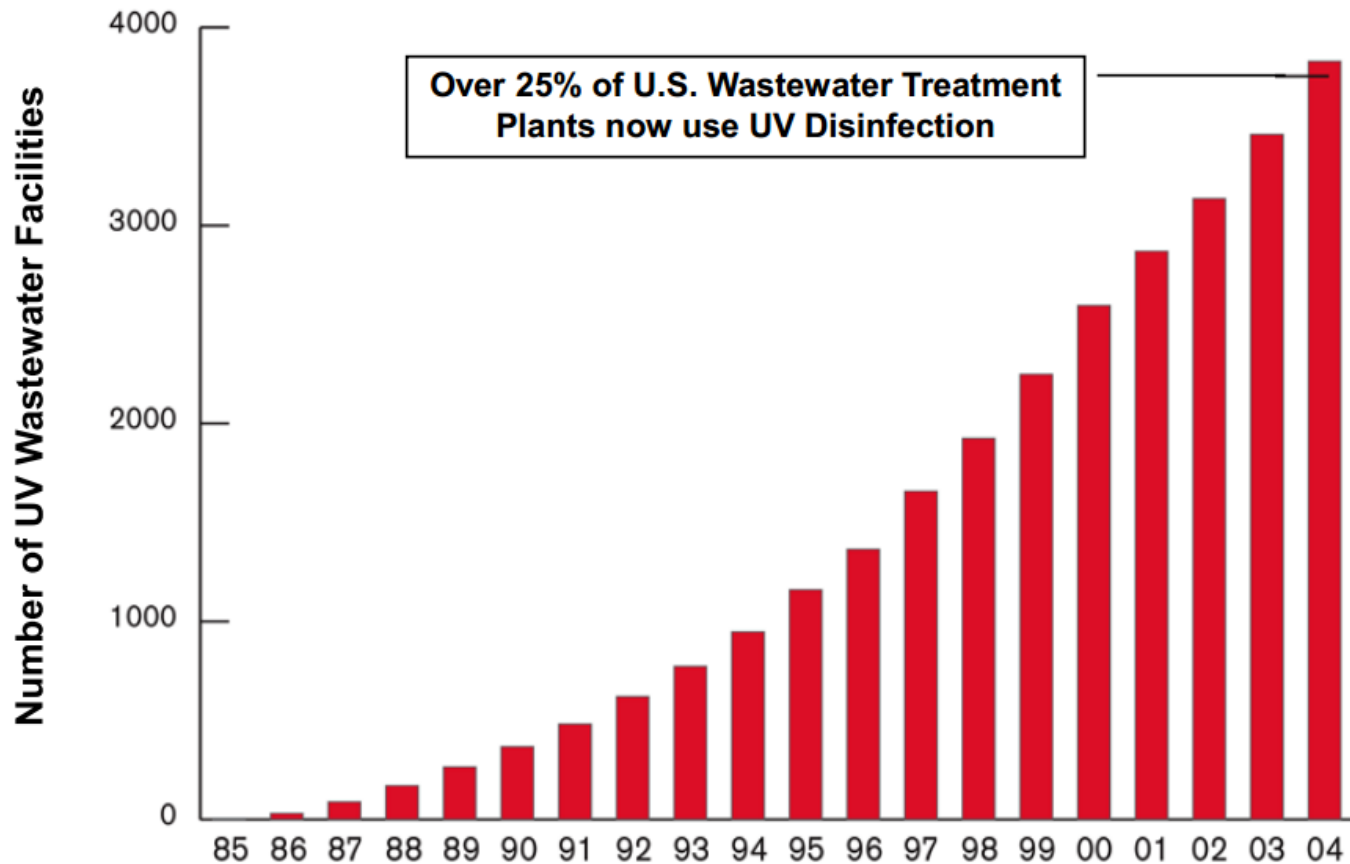
\$ in thousands



# Growth of UV installations in US

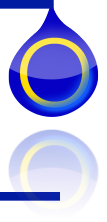


## GROWTH OF UV

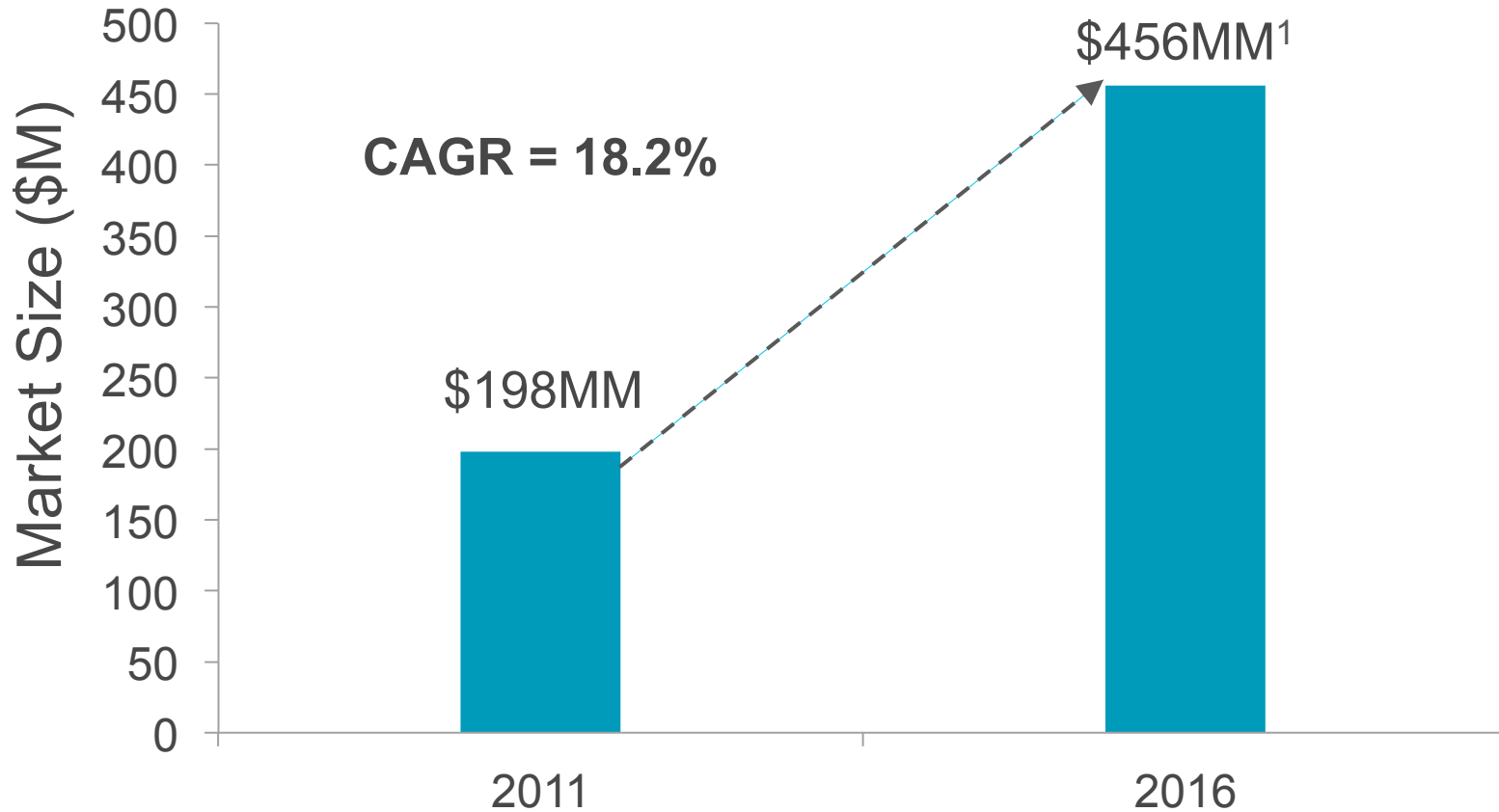


Source: [ohiowater.org](http://ohiowater.org)

# Global Market Growth Trend



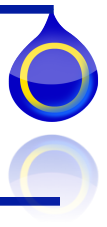
## UV wastewater disinfection equipment



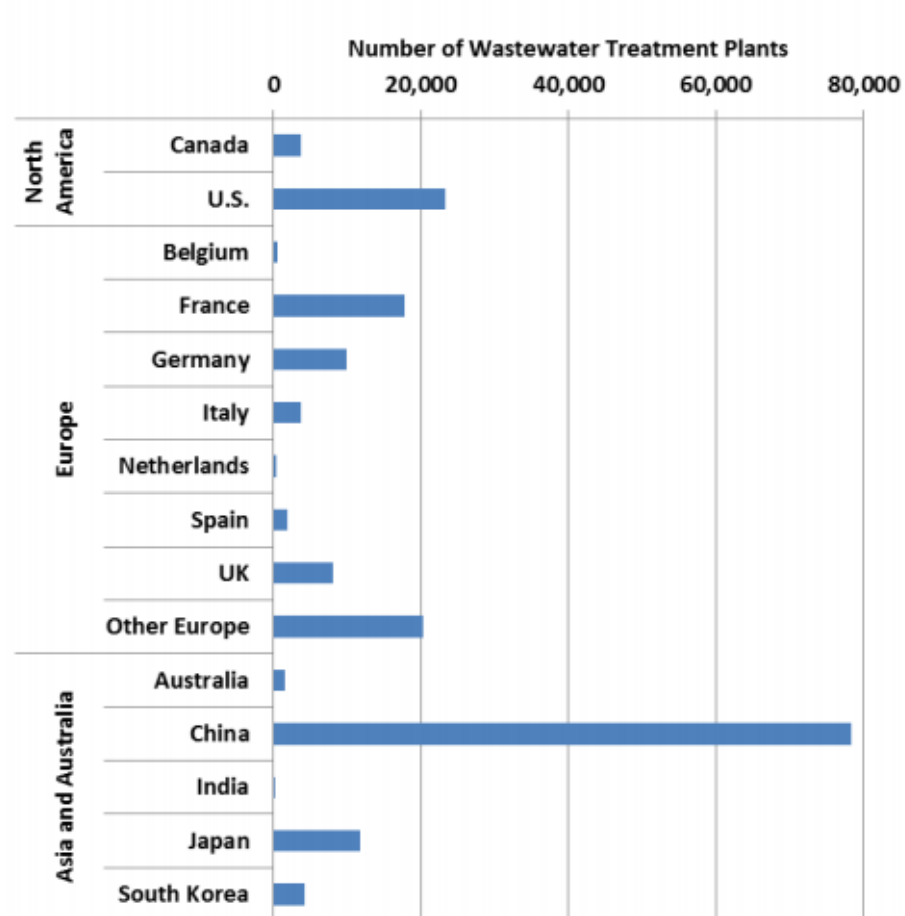
<sup>1</sup>BCC Research



# Global distribution of wastewater plants



**Figure 1-1**  
**Installed Base for Existing Wastewater Treatment Plants**



Source: China Statistical Press (2011); Eurostat (2012); SBI Energy.