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Water and Wastewater management has not changed much over the past two centuries: it relies on a centralized model with large facilities and networks of underground pipes. (DON'T!) WASTE WATER

But how will it look like in 2050?

70% of the world's population will be living in cities. So we can either build back the exact same way, or we have a moment right now in history where we can kind of rethink it!

The good thing is that we don't NEED to reinvent the wheel.

We've seen in the past how the energy sector could act as a predictor of the transformations the water sector would undergo:

(DON'T!) WASTE WATER

We need centralized folks doing the large plants, but we also need distributed ones. Diversifying makes our systems a lot more resilient.

Bonus point for being a laggard:

we can learn from what fast movers did wrong - this analogy applies to energy and comparable sectors like telecommunications.

> Now, if we believe that central approaches need to be enhanced by distributed ones, we still have to define the right scale for those decentralized units.

The rate at which we are adding new building stock to our global supply is like; we're adding a new Manhattan every single month from now until 2060.

(DON'T!) WASTE WATER

This means urban density gets dramatically increased, and the existing infrastructure gets outlasted by the flows it has to deal with.



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Hence, utilities are interested in keeping the additional water loads out of their saturated networks—Aka, in the new buildings.

That challenge may be turned into an opportunity!



If we capture that wastewater, treat it and reuse it in the building for non-potable applications, we can sometimes get up to 95% of the building's water use that recycled water sources can provide!

Indeed it doesn't stop there, as wastewater can be turned into three outputs:

(DON'T!) WASTE WATER

Recycled water

as we've just seen

Organic soil amendments

by valorizing the wastewater organics

Recovered wastewater heat

By our calculations, there is enough energy being lost through wastewater heat to power every single electric vehicle on the road in the United States right now

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That's why cities like San Francisco, Los Angeles, or Austin adopt regulations that make onsite reuse mandatory in new buildings.

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But the incentive doesn't come only from the law:



By reusing water on site, a lot of these projects are able to reduce their water and sewer bills significantly. We're helping them to get an ROI of three to five years!

Solving the Urban Water Management riddle while saving costs and beefing up the circular economy...

When do we start?

We also covered:

 How distributed water management will dramatically enhance the system's resilience by reducing interdependencies



- How there's a last frontier to break: overcoming the "Yuck" factor - and how to do so
- How Epic Cleantec addresses and discusses the problem more than the solution in their marketing – and why
- How they actually treat the wastewater in buildings - and what's inside their "black box."
- How Epic's system is deployed in a 20 story office in San Jose and what it enables
- How "one size fits all" simply never applies in the Water Industry - and how Epic Cleantec deals with this
- Business Model, GoTo Market routes, the secret to success as a disruptive start-up, Accumulating (well-deserved) Awards... and much more!

