

Day 1 - Tuesday Nov 2

Chat Conversation

The Places We Go: Implementation Projects Around the World

Moderator: Abe

Presenters

Julien Saludas, TOOPI

Innovation and deployment program

- **From Kai Udert:** Could you please explain why there is not waste? The ratio of nutrients in urine most probably does not fit the ratio of nutrients in the lactobacilli.
- **From Hayley J. Smith (PHLUSH):** Do you or others consider this a urine-based fertilizer or only that urine was used in the process of creating the product?
- **From Shawn Shafner, POOP Project:** I would love to know more about the context in France that has made this possible - what is the regulatory and / or social infrastructures that have enabled you to do urine collection in gas stations and schools? Also, how big is the project now? How many collection sites, how many gallons, etc.

Jess Laporte, SOIL

Large-scale production of urine diverters for a household

- **From Mathew Lippincott:** The “nut ridge,” splash-back on users, and urine “escape” over the front edge were the major issues to address
- **From Prithvi Simha:** Similar to the progress SOIL has made with the diverter design, are there any promising options that you are/have been testing for treating the urine that is currently discarded?
- **From Samuel Getahun:** Do people have to sit for effective urine separation?

Sybrand Metz, DESAH

Decentralized Wastewater Treatment for a Green Future

- **From Ole Ersson:** Is all urine mixed with feces in a vacuum toilet? Is there any possibility of separation of urine from feces?

Kim Nace

Innovative technologies for capturing nutrients from source separated urine or blackwater

- **From Kai:** how many people is the system designed for?
- **From Michel Reichman:** Is your stakeholder analysis available somewhere or are you thinking of publishing it?

Kevin Orner

Opportunities and Challenges of Installing a Urine-Diverting Toilet at the University of California, Berkeley

- **From Carol McCreary:** Is the lack of regulations a barrier or a pathway? Challenge or opportunity?
 - **Response from Kevin:** Both. I view the lack of regulations as a challenge because regulators or facilities may want to see regulations before granting approval. Lack of regulations are an opportunity because this community can help write the regulations.

- **From Kai Udert:** Did the costs also include the piping and the collection tank?
 - **Response from Kevin:** The costs I had shown on the screen were just for installation. The piping and collection tank was not included, but I believe it was under \$1,000.
- **From Shawn Shafner, POOP Project:** Thanks for your transparency Kevin. So important to discuss challenges as well as successes.
- **From Rebecca Nelson:** Thanks, Kevin. Sorry if i should have caught it, but what was the cost of the Laufen unit itself?
- **From Carol Steinfeld:** Breaking into walls and existing plumbing is a big deal. There are regulatory pathways in neighboring California cities. I'll write to you directly about a way to do it based on two other installs in Cali. It's absolutely not easy, no! Good for you for attempting it there. That's good info for others.
 - **Response from Kevin:** Yes, that would be great. My email is kevin.ornier@mail.wvu.edu.

Ole Ersson

Urine diversion and utilization in a populous urban setting

- **From Kai Udert:** did you consider "drip fertigation"?
 - **From Robert Cossette:** The solution is to use Solar-Dripper ;-)
 - **From Renaud de Looze:** No problem of struvite if urine is diluted Or if you have soft water. Foliar spray is okay to give a kick. u can use foliar spray for lawn for example
 - **From Ole Ersson:** Thanks to everyone who suggested considering urine drip irrigation for the Kailash project. We'll check it out!
 - **From Hilda Maingay:** Abe, we would love to hear about your urine drip irrigation project
- **From Merilee Karr PHLUSH:** Ole, is that a WaterRight hose?
- **From Tatiana Schreiber:** When you use urine fertilizer on the flowers, where it looked like primarily as a foliar spray, have you seen significant plant response? How does it affect bloom, for example?
- **From Ole Ersson:** Here is a link to my slides if anyone is interested:
<https://docs.google.com/presentation/d/1avBxp49XLtaegpas-PiBdBuniGMO3B1dCo0vRS4U3s/edit?usp=sharing>