

Sewage might be unappealing, but it is far from useless. As Greater Victoria explores how to treat its sewage, we look at how it might also reclaim heat, water, natural gas, power and fertilizer from its otherwise unwanted waste.

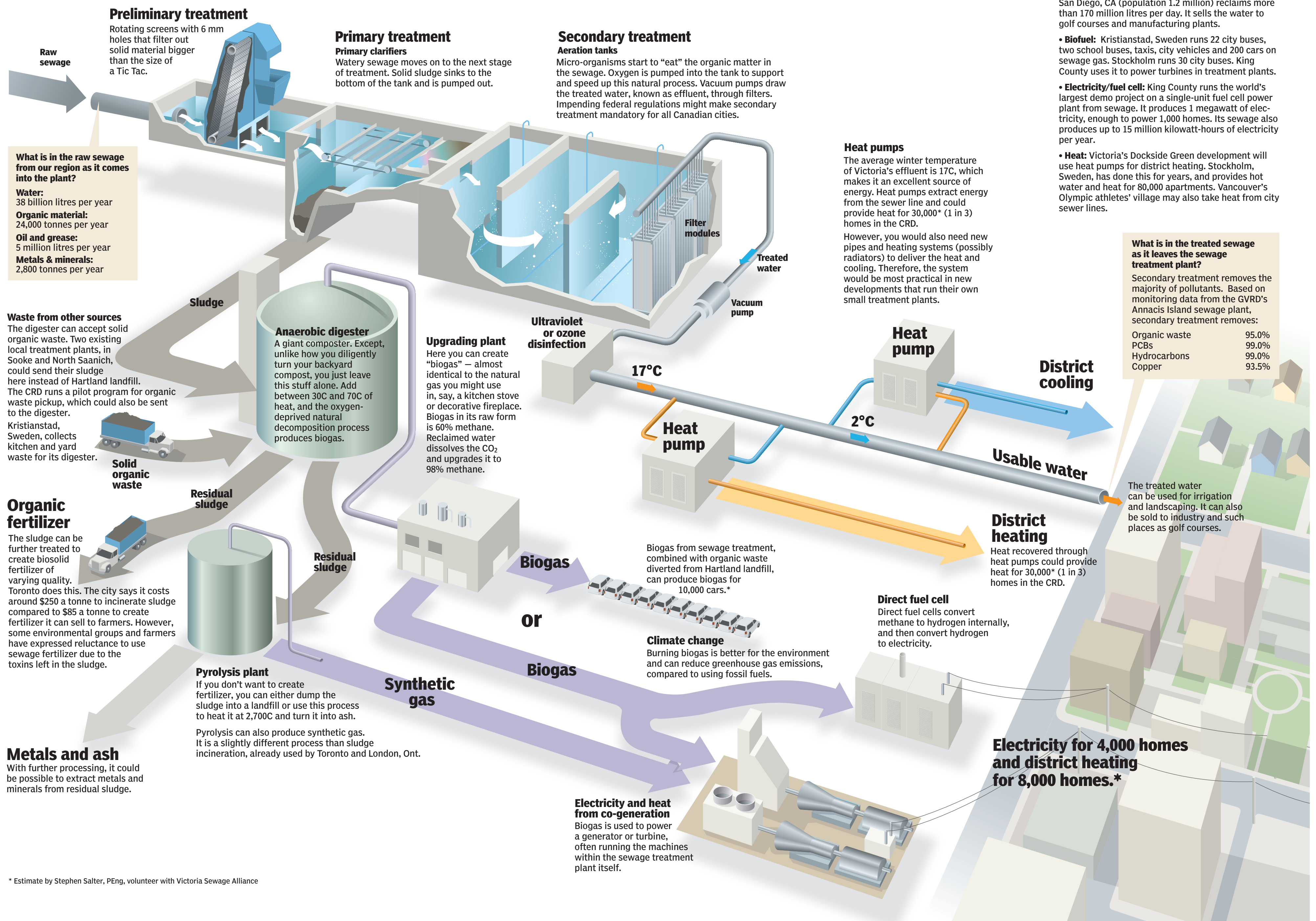
Waste not

Making the most of our sewage

Who else is doing this?

Here are some examples:

- **Water reclamation:** Sequim, WA (population 4,928), uses it for irrigation, landscape and fish habitat enhancement. King County, WA (population 1.8 million) recovers 984 million litres of water per year, San Diego, CA (population 1.2 million) reclaims more than 170 million litres per day. It sells the water to golf courses and manufacturing plants.
- **Biofuel:** Kristianstad, Sweden runs 22 city buses, two school buses, taxis, city vehicles and 200 cars on sewage gas. Stockholm runs 30 city buses. King County uses it to power turbines in treatment plants.
- **Electricity/fuel cell:** King County runs the world's largest demo project on a single-unit fuel cell power plant from sewage. It produces 1 megawatt of electricity, enough to power 1,000 homes. Its sewage also produces up to 15 million kilowatt-hours of electricity per year.
- **Heat:** Victoria's Docks Green development will use heat pumps for district heating. Stockholm, Sweden, has done this for years, and provides hot water and heat for 80,000 apartments. Vancouver's Olympic athletes' village may also take heat from city sewer lines.



* Estimate by Stephen Salter, PEng, volunteer with Victoria Sewage Alliance