

## Saudi thirst for water is creating a toxic **brine** problem

Saudi Arabia isn't just the world's top crude oil exporter. It's also the biggest producer of a toxic **effluent** that's the byproduct of slaking the desert kingdom's thirst for water.

brine 盐水; 海水

effluent 污水; 废气

United Nations scientists warned that **desalination** is creating huge **volumes** of chemical-laced brine that risks **contaminating** food chains if left untreated. The problem is most **acute** in the Middle East and North Africa, which account for two-thirds of the world's water contaminated by energy-intensive desalination plants.

desalination 海水淡化

volume 大量的; 体积; 音量

contaminate 污染

acute 严重的; 急性的

Desalination is an industrial process that uses heat and pressure to make seawater fit for human consumption. For every **liter** of **potable** water produced, the UN estimates about 1.5 liters of liquid polluted with **chlorine** and copper are created. When pumped back into the ocean, the toxic brine **depletes** oxygen and impacts **organisms** along the food chain.

liter 升

potable 便携的; 可饮用的

chlorine 氯

deplete 耗尽; 使衰竭

organism 有机体

cubic 立方的

Saudi Arabia's desalination plants produce about 31.5 million **cubic** meters of contaminated water each day. That volume of liquid is equivalent to about 20 million **barrels** of oil a day, or, double the amount of crude it currently produces. The Kingdom is **tendering** seven desalination projects as it tries to **alleviate** the impacts of depleted **aquifers**.

barrel 桶

tender 招标; 偿付; 温柔的

alleviate 减轻; 缓和

aquifer 含水层

Other countries have successfully used the brine to cultivate *forage shrubs*, though at the cost of land *salinization*. “There is a need to translate such research and convert an environmental problem into an economic opportunity,” said Manzoor Qadir, the UN institute’s assistant director. “This is particularly important in countries producing large volumes of brine with relatively low efficiencies, such as Saudi Arabia, U.A.E., Kuwait and Qatar.”

forage 饲料

shrub 灌木

salinization 盐碱化