

the nuclear threat in Ukraine and at home and why nuclear energy cannot solve the ecological crisis

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nukewatchinfo.org

Nukewatch

Working for a nuclear-free future since 1979

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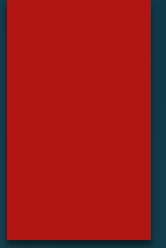
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at a safe distance from the
mushroom cloud

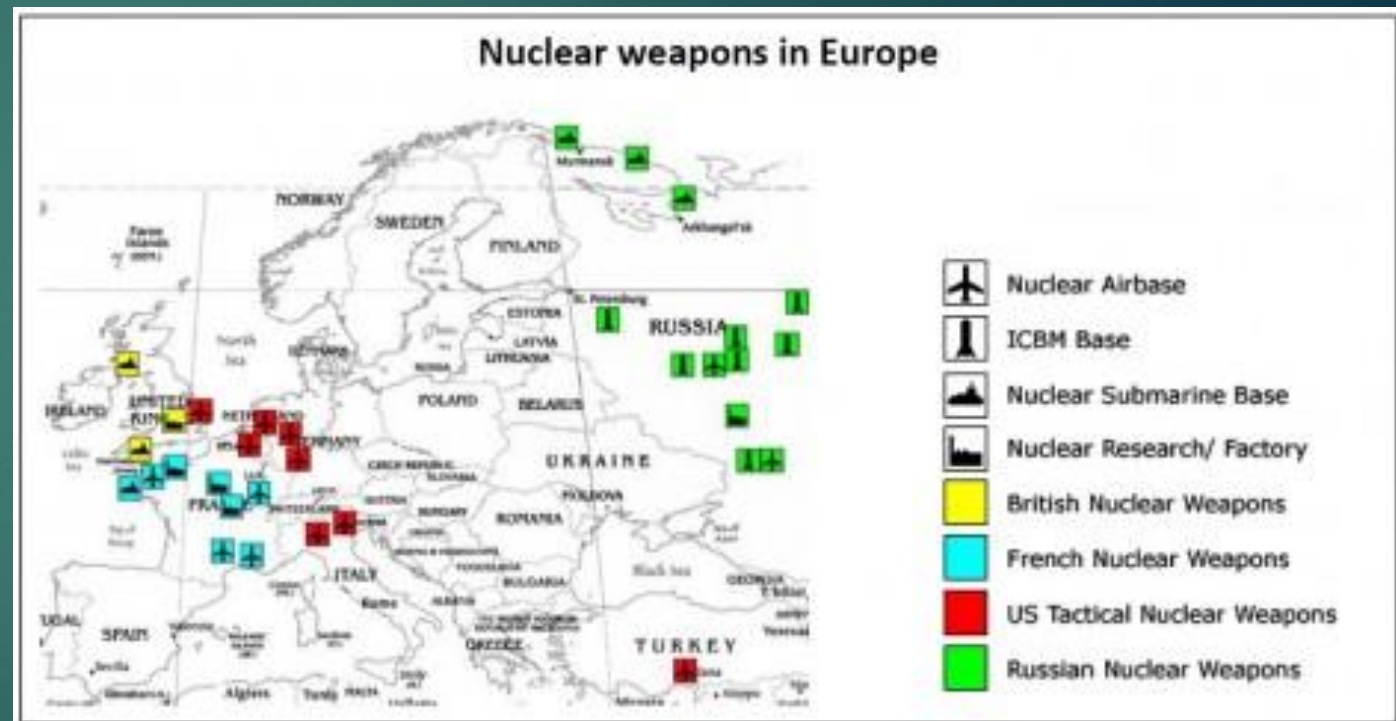
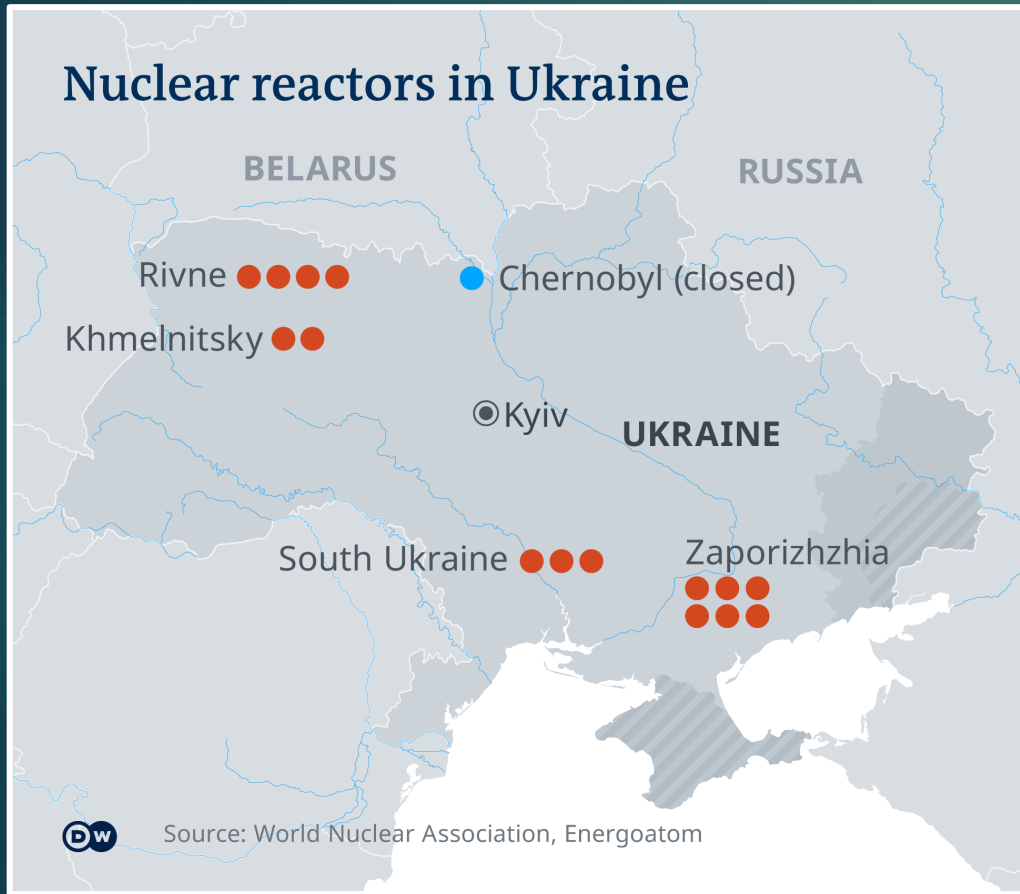


Image from kid's movie, "Boss Baby"

under the mushroom cloud

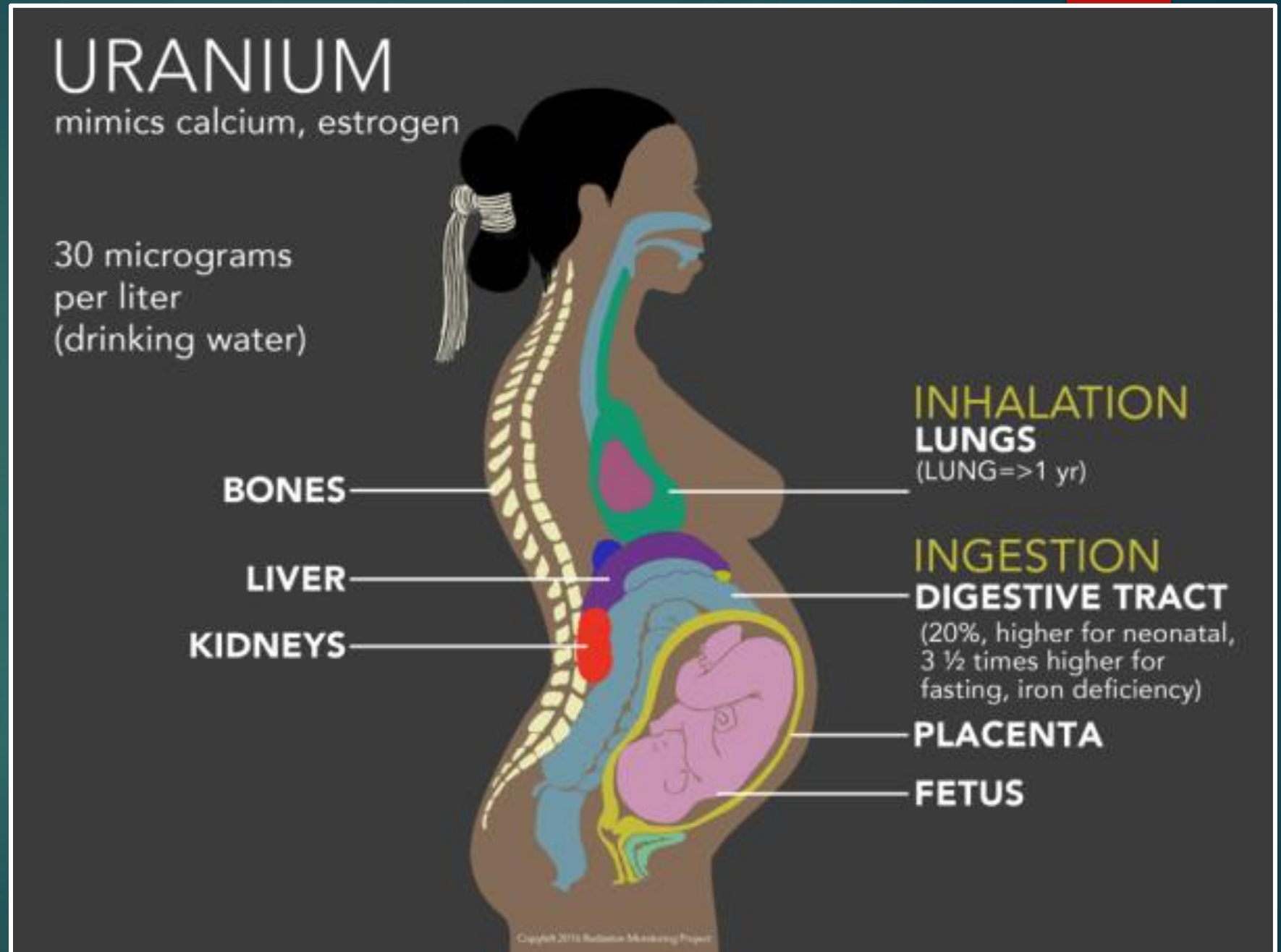


twin nuclear threats



Uranium mimics the hormone estrogen and calcium, replacing nourishing calcium with radioactive uranium. It can take years for inhaled uranium to leave the lungs. Ingested uranium will end up in the bone, kidneys, and liver, but can be absorbed faster in a newborn's digestive system.

—Graphic created by the Radiation Monitoring Project, used with permission, and the data is courtesy of Cindy Folkers of Beyond Nuclear.



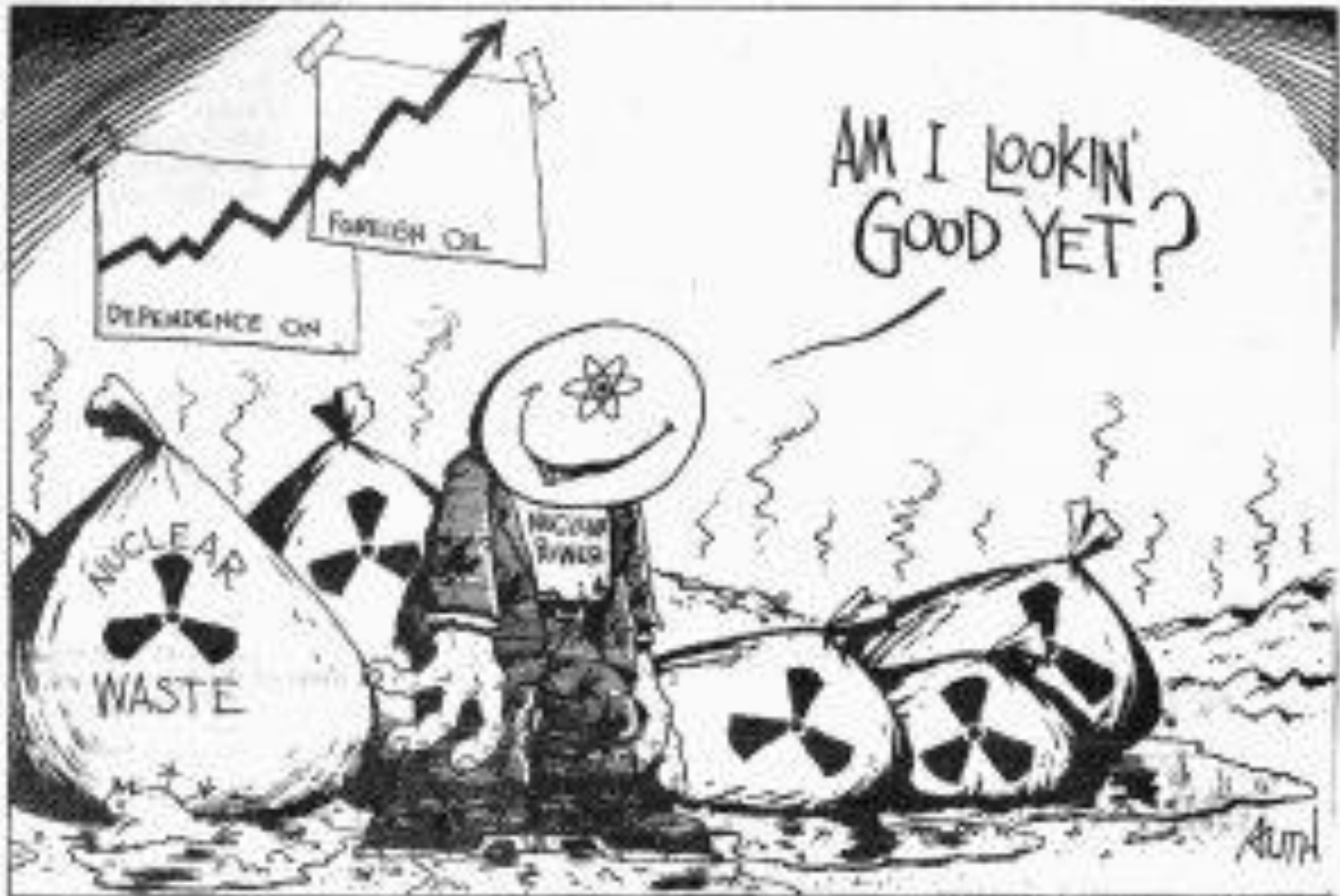
problems with nuclear power

- ▶ Environmental justice issues – uranium mining, radioactive waste storage
- ▶ No solution for radioactive waste – 90,000 metric tons in U.S.
- ▶ More than 60 studies have shown increases of childhood leukemia around nuclear facilities worldwide

nuclear CANNOT solve climate crisis

Cannot be deployed fast enough to “replace” or transition from fossil fuel production by the IPCC deadline of 2030 for transforming our entire energy system

We'd have to replace the existing 400 nuclear plants and build 1,600 additional plants. 3 nuclear plants have to be built every 30 days for 40 years, and by that time climate change will have run its course for us



Cartoon by Tony Auth, Philadelphia Inquirer

nuclear CANNOT solve climate crisis

- ▶ Ecological crisis, not just climate
- ▶ 30 million gallons/hour to COOL power reactors – need cool water, not heated water of the future world
- ▶ France uses 40% of fresh water to cool reactors
- ▶ Sea level rise - 2020 report by Moody's Investors Service, "over half" of US nuclear reactor generating capacity "face growing credit risks" in the next 10 to 20 years due to flooding, hurricanes, heat stress and other predicted impacts of climate change

NEW nuclear CANNOT solve climate crisis

- ▶ 2023, 2016, 1996 – last 3 reactors to begin operation in U.S
- ▶ would not be available in sufficient numbers commercially much before the mid-2030s
- ▶ water-, molten salt-, and sodium-cooled SMR designs would generate 2 to 32 times more radioactive waste, per unit of electricity generated, than current reactors
- ▶ SMRs are expected to cost more per unit of energy than even the current generation of uneconomic reactors — which in IL. required \$3.05 billion worth of ratepayer-funded bailout guarantees to survive

what can we do?

▶ In Illinois

- ▶ oppose repeal of the moratorium on construction of new nuclear power reactors (HR1079; SB76)
- ▶ oppose SMNRs
- ▶ pass nuclear ban treaty resolution in your town

▶ Nationally

- ▶ oppose consolidated interim storage and Yucca Mtn proposals
- ▶ H. Res. 77 calls on the United States to embrace the nuclear ban treaty

for more information

- ▶ [Nukewatch](http://nukewatchinfo.org) - nukewatchinfo.org
- ▶ [Nuclear Ban Treaty Collaborative](http://nuclearbantreaty.org)
nuclearbantreaty.org
- ▶ [National Radioactive Waste Coalition](http://radioactivewastecoalition.org)
radioactivewastecoalition.org
- ▶ [Nuclear Energy Information Service](http://neis.org) - neis.org
- ▶ [Beyond Nuclear](http://beyondnuclear.org) – beyondnuclear.org

resources

- ▶ Yukiyo Kawano - yukiyokawano.com
- ▶ Beyond Nuclear - Nuclear Reactors in Ukraine – Linda Pentz Gunter - www.youtube.com/watch?v=N0nllY1sm98
- ▶ Radiation Monitoring Project - dinenonukes.org/radiation-monitoring-project
- ▶ Navajo Birth Cohort Study - <https://www.indian.senate.gov/sites/default/files/10.07.19%20Dr.%20Christensen%20IHS%20Testimony%20on%20Radiation%20in%20Indian%20Country.pdf>
- ▶ Wermuth Asset Management 5th Annual Investor Event - www.youtube.com/watch?v=B3nhhOitYmk
- ▶ European reactor shut downs - qz.com/1348969/europes-heatwave-is-forcing-nuclear-power-plants-to-shut-down
- ▶ Study Rad waste from SMRs - pnas.org/doi/10.1073/pnas.2111833119