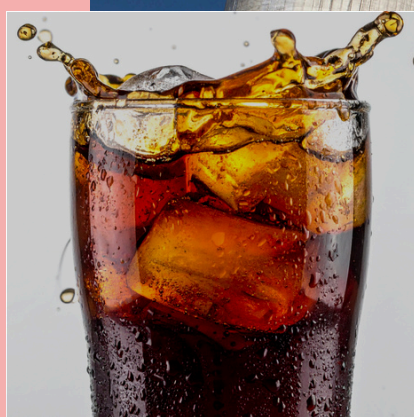
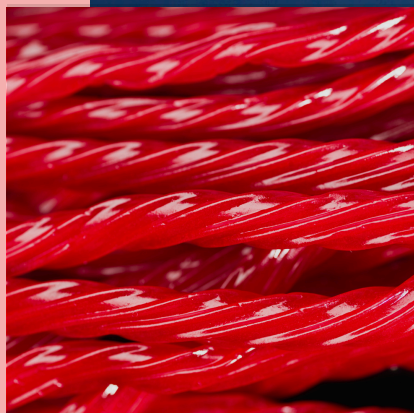


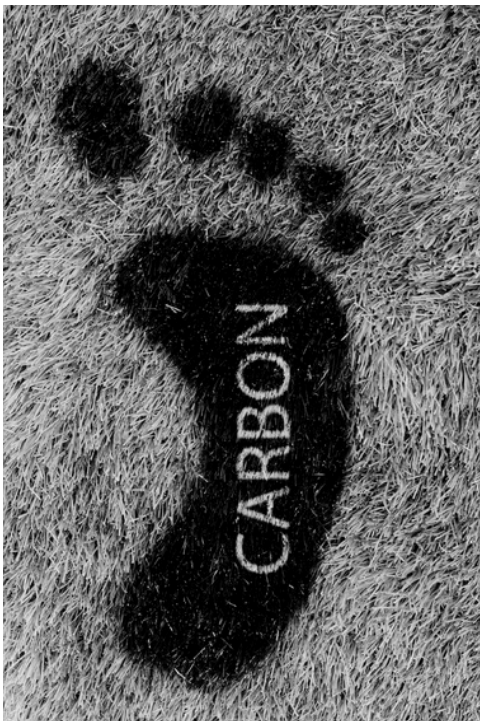
RED LICORICE, DIET SODA, AND NUCLEAR ENERGY



Commentary by
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Earlier this year, Dovetail reported on the growing interest in nuclear energy, including small modular reactors (SMRs). As covered in [the report](#), at least 25 countries, including the U.S. and Canada, are actively engaged in the policy, finance, and infrastructure pathways that are needed to enable expansion of nuclear energy.



One of the selling points of nuclear energy in 2026 is that it is “carbon free” - meaning that at the point where energy is produced, there are no carbon dioxide emissions (fossil fuel use and other sources of greenhouse gas emissions are associated with the full life cycle of nuclear energy from raw material extraction, operation, storage, etc.). Another selling point is the statement that “80% of IPCC scenarios that keep warming below 1.5 degrees Celsius include expanded use of nuclear energy.” In other words, if you care about climate change and/or appreciate the rigor of the analysis prepared by the Intergovernmental Panel on Climate Change (IPCC), then you are on team-nuclear. **But is it that simple and what does it have to do with red licorice and diet soda?**

There is something very compelling about simple answers. It is comforting to imagine that big challenges can be solved with one big strategic action. One way to feed this desire is to boil down complex situations to simplified scenarios - such as taking the issue of climate change and making it all about carbon emissions, or taking healthy weight goals and making it all about calories, or taking food nutrition concerns and making it all about fat content. If all you care about is the fat content of foods - then red licorice makes perfect sense as a zero fat food. If all you care about is calorie intake - then diet soda is the choice to make. If all you want is zero carbon dioxide emissions, then nuclear energy is your simple answer.

If all you care about is the fat content of foods - then red licorice makes perfect sense as a zero fat food. If all you care about is calorie intake - then diet soda is the choice to make. If all you want is zero carbon dioxide emissions, then nuclear energy is your simple answer.

Never mind the complexity of a robust, healthy diet and never mind the trade-offs with nuclear energy - as long as the single measure of success is met - we're good to go. Or are we?



When one takes a closer look at the current interest in nuclear energy, including the projections by the IPCC, one of the clear stated facts is that significant benefits are not expected to accrue from nuclear energy until mid-century. Around 2050 - more than a generation from now - the use of nuclear energy will be substantial enough to start delivering on the benefits related to addressing greenhouse gas emissions and climate change. So, what is one to do in the meantime? Lucky for us, the IPCC also answers that question.

While 80% of IPCC scenarios suggest nuclear energy is a key strategy; there is something even more IPCC scenarios rely on that is key during this decade and for today's generations - well before 2050. [All of the IPCC scenarios that keep warming below 1.5 degrees rely on bioenergy.](#) Key immediate steps are the phasing-out of unabated coal consumption (coal use without carbon capture and storage) and phasing-in of bioenergy with carbon capture by 2030. That is what we need to be working on while we are waiting for (and investing in) the nuclear energy breakthroughs of the mid-century.

For the transition to less pollution from energy production to be successful, there are things we need to do today, tomorrow, next year, five years from now, ten years from now, fifteen years from now, twenty years from now, mid-century, and beyond. That is what the IPCC scenarios lay out for us - steps 1, 2, 3, 4, 5, 6.... to get us through this century and into the future of clean, abundant, diverse energy supplies.

Yes, nuclear energy is part of the global energy portfolio now and for the future, but the bridge to get where we want to go is built upon reduced fossil energy use, expanded renewable and bioenergy use, and investment today. We can have our red licorice and diet soda when the time comes (and in moderation), but let's start with a tall glass of water and a big green salad.

