KVMR METHANE spot for February 2 –

METHANE has popped into the headlines a lot since it was brought forward at the COP 26 climate change forum last Fall. And for good reason. Methane is the second most abundant Greenhouse Gas after carbon dioxide (CO2), accounting for about 20 percent of global emissions. Methane – the main component of natural gas – is more than 80 times more potent than carbon dioxide in terms of warming the climate system over the first two decades after its release – thus the concern. It does not hang out in the atmosphere as long as carbon dioxide, but is much more damaging for that approximately 80 years.

And it is damaging for its whole life cycle – from the point of extraction from the ground all the way to the landfills where it does not go away for almost forever. Over the last two centuries, methane concentrations in the atmosphere have more than doubled, largely due to human-related activities. The largest sources of [methane emissions from human activities in the United States](https://www.epa.gov/ghgemissions/overview-greenhouse-gases#methane) are oil and gas systems, coal mining, gold mining, livestock enteric fermentation, and landfills – primarily from organic food waste and plastics while they are breaking down. In fact, landfills are the third-largest source of methane emissions in the United States, according to the [*Inventory of U.S. Greenhouse Gas Emissions and Sinks*](https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks).

We humans can change our thinking and behaving to change this degradation to our Earth which supplies absolutely everything we have and use. Composting is one great way to start to use and reuse food scraps to nourish our gardens rather than throwing them away into the landfill where they do exactly the opposite. Save money too.

Another very important way to reduce the methane dangers is to SAY NO TO PLASTIC. Vow to never take another plastic bag and reuse what you have. *Dr. Sarah-Jeanne Royer, a researcher from the University of Hawaii, says one type of plastic,* LDPE, is the most common and most prolific emitter of both methane and ethylene gases. Many everyday items, including grocery bags, 6-pack rings, sandwich and snack bags, chip bags, take-out food containers, and plastic wrap are made of LDPE.

Let’s think about the lifecycle of plastic and the need to reduce methane BEFORE you take an item off the shelf. Can we find it in paper? Can we find a bulk source to refill existing containers? (Check out Gaia in Nevada City)

Film plastic like grocery bags, shrink wrap (a thicker film but still flexible), and bubble wrap can be taken to a number of stores around town (SPD, SaveMart, Safeway, and B&C) for collection to be sent to Trex Decking as the raw material for their products. Waste Management cannot take those plastic items, but they can predictably recycle all #1 and 2 plastic bottles, and some berry containers so DO put those in the recycle bin. Check the number in the triangle on the bottom.

Of course, you can put all your plastic in the recycle bin but there is no guarantee that Waste Management can sell the #3-7. You can, however, get a TerraCycle Zero Waste box (repeat and spell it out) to capture all those to return for reprocessing into nurdles to be made into a new post-consumer waste product. This is a real feel good for me.

The good news is that our ever-resourceful and creative humans are coming up with solutions! Of course, FIRST it is up to US to reduce our consumption! Many waste companies are starting to capture the methane gas created in the landfills to be used as an energy source. Good news is that Waste Management currently supplies landfill gas to 69 gas-to-energy projects in 21 states. Over the years, Waste Management's commitment to capturing and using landfill gas has helped reduce greenhouse gas emissions from its landfills by 50 **percent**.

We need to pressure manufacturers to offer products from materials that are recycled or renewable, rather than producing new products from raw materials which are getting more and more scarce. This is the start of Circular Economy rather than the Take-Make-Dump economy we have now. Write a letter to the manufacturer of a product you use often (for me it was a #5 yogurt container) to ask them to change to a type of container that it truly recyclable. Or compostable. Many new design alternatives are coming out.

Lots to think about as we start to REGENERATE our world to make it livable and beautiful for many generations to come. Methane and plastics are at the top of the list.

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