# Welcome to All

## Earth Day Teach-In: How to Lower Your Carbon Footprint



### Hosted by OSJ's Care for Creation Committee

#### What is Your Carbon Footprint?

- A carbon footprint is the total amount of greenhouse gases (including carbon dioxide and methane) that are generated by our actions.
- The average carbon footprint for persons in the U.S. is 16 tons per year.
- The global average is about 4 tons per year.
- To avoid a 2°C (3.6°F) rise in global temperatures, the average global carbon footprint per year needs to drop to under 2 tons by 2050.
- Lowering individual carbon footprints from 16 tons to 2 tons doesn't happen overnight, but it can be done!

Carbon Dioxide = CO2



Methane = CH4

We Know CO2 Concentrations are Rising in the Atmosphere



We Know Global Temperatures Have Been Rising in Step with Rising Atmospheric CO2



#### Record of Atmospheric CO2 & Global Temperatures: 1960-2020



#### Why Should We be Concerned about an Already Baked-In 1<sup>o</sup>C Rise in Temperature?

- With a 1.5°C increase, coral reefs around the world are projected to decline further by 70-90%.
- With a 2°C increase, coral reefs are projected to decline by more than 99% marking an irreversible loss in many marine and coastal ecosystems.
- Devastation of the coral reefs is just one of numerous other impacts that will impoverish our planet.



heathy coral reef bleached-out coral reef

Global Warming Potential (GWP) of Methane Relative to Carbon Dioxide

Common Name	<b>Chemical Formula</b>	GWP Values*
Carbon dioxide	CO2	1
Methane	CH4	28

\* GWP values are for 100-year time horizon.

- Table signifies that methane has a GWP that is 28 times greater than carbon dioxide, making it a far more potent greenhouse gas on a per weight basis.
- One pound of methane has the same GWP as 28 pounds of carbon dioxide!
- In emission inventories you will see methane emissions expressed as "CO2 equivalents" or "CO2e."
  - For example, "10 pounds of methane" would be expressed as "280 pounds CO2e."

#### Today's Agenda

- Zeroing Out Old St. Joseph's Carbon Footprint from Electricity Consumption
- How to Protect the Earth with Environmentally Friendly Transportation
- Recycling at Home: Can You Make a Difference?
- How Eating a Healthy Diet Also Protects the Earth
- Old St. Joseph's Composting Initiative
- Comparing Household Carbon Footprints Using the EPA's Household Carbon Footprint Calculator











Access to Information Presented at Teach-In

All presentations as well as other supplemental information about carbon footprints will be posted on our new Care for Creation webpage. Check it out at:

https://oldstjoseph.org/parish-life/care-for-creation/