



CO₂ Racing: What's the Environmental Impact?



Pitsco has been questioned about the effect on the environment of the release of CO₂ gas from our CO₂ cartridges during dragster races. Our very own Dr. Zoon has provided an explanation showing a net sum zero effect – meaning only as much CO₂ gas is put back into the atmosphere as was taken out when the cartridges were manufactured. Here is the process:

Carbon dioxide (CO₂) is commercially obtained by capturing the by-products of combustion or biological processes that would normally be released directly into the atmosphere. These processes include hydrogen production, ammonia production, and commercial plant fermentation processes. After the CO₂ is collected from these sources, it is liquefied for storage and transport.

Pitsco's manufacturer takes liquefied CO₂, transforms it into dry ice (a solid form of CO₂), and drops an 8g mass of the solid CO₂ into a preformed steel cartridge. The opening of the cartridge is immediately sealed with a patented safety seal, keeping the CO₂ gas contained within the cartridge until it is released during the dragster race. The eight grams of CO₂ return to the atmosphere, replacing the original eight grams of CO₂ that were captured in the production of the carbon dioxide.

So, the net effect is that eight grams of CO₂ gas are taken from the atmosphere, put into the cartridge, then released back into the atmosphere. This is what scientists term a net sum zero effect – the loss equals the gain.

And as for the **steel cartridge casings**, they should be recyclable anywhere that steel cans and other steel products are recycled.

