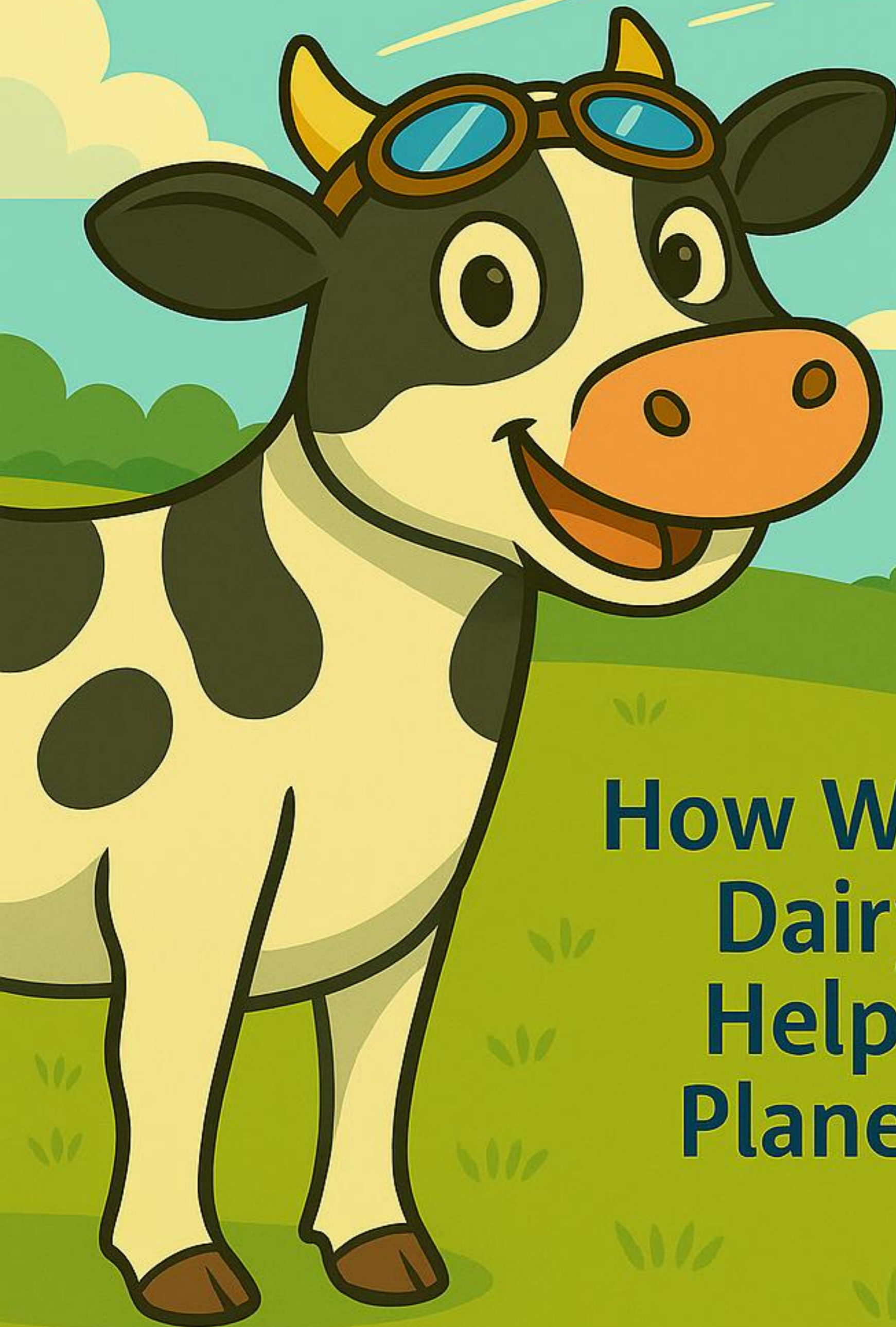


# From Moo to the Moon

(Okay, maybe not all the way  
to the moon –but  
really, really far)



**How Wisconsin  
Dairy Can  
Help Make  
Planes Soar**

# Glossary

**Permeate:** A sugary liquid left over after making dairy products like cheese and yogurt. It contains a lot of lactose.

**Lactose:** A natural sugar found in milk.

**Ethanol:** A kind of alcohol made from sugars. It can be used as fuel.

**SAF (Sustainable Aviation Fuel):** A special fuel made from renewable sources like plants or dairy waste. It helps airplanes fly while being better for the environment.

**Biomass:** Plant or animal material used to make energy, like leftover crops or dairy byproducts.



Hi! I'm Buttercup, a dairy cow from Wisconsin. Every day, I provide delicious and nutritious milk to drink and to make cheese, yogurt, butter, sour cream, and ice cream.

But did you know...  
part of my milk can  
help airplanes fly?!



Let me tell you how!



When my milk is used to  
make dairy products,



ultra-filtered  
or lactose-  
free milk



cheese



yogurt

That leaves  
behind a  
sugary liquid  
**PERMEATE**

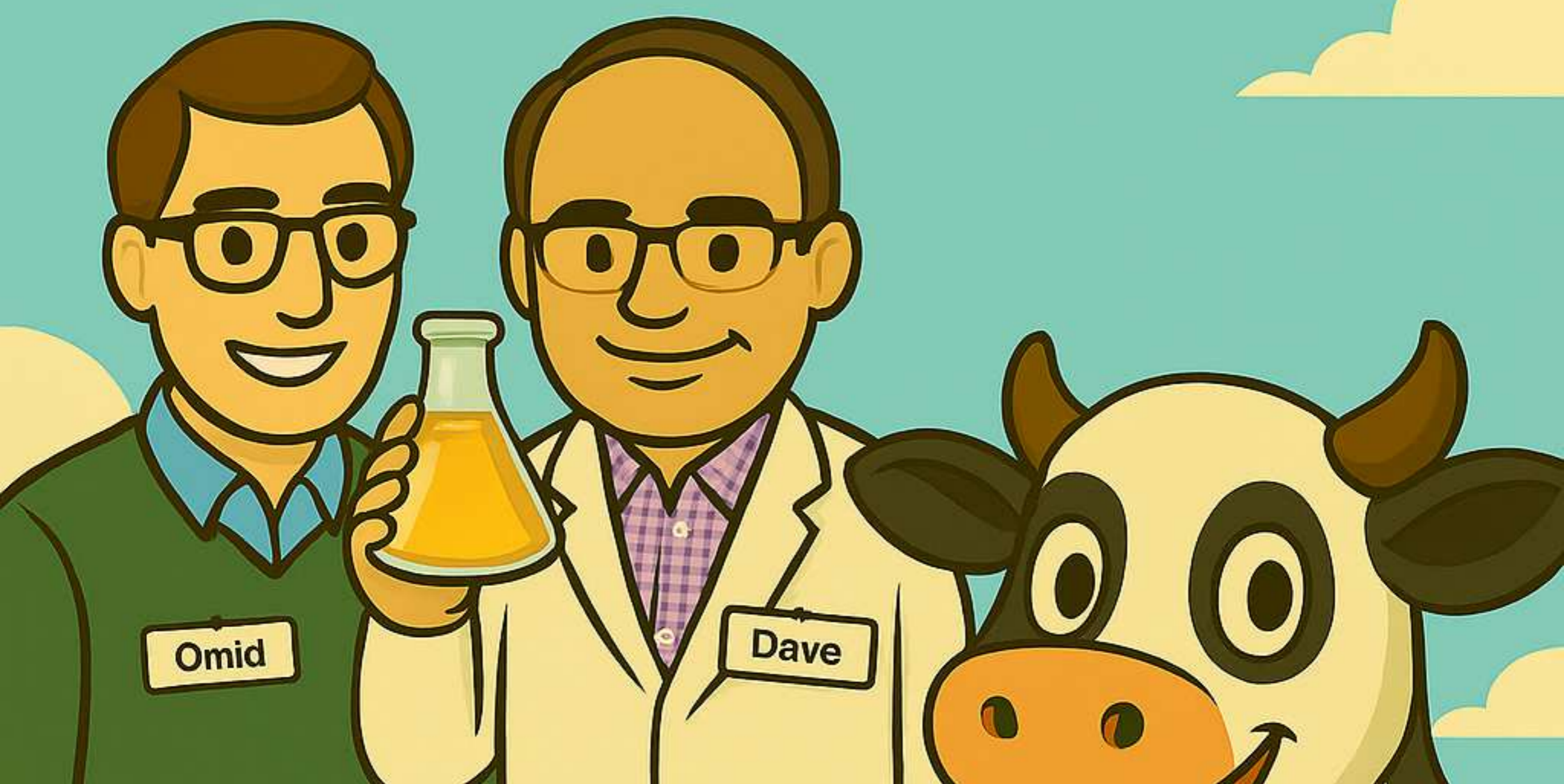


# PERMEATE presents a sustainability challenge



Wisconsin's dairy industry creates a lot of permeate that needs to be thrown away.

The really smart guys at Dairy Distillery figured out the sugar in permeate can be turned into ethanol—a kind of alcohol that can be used as fuel.

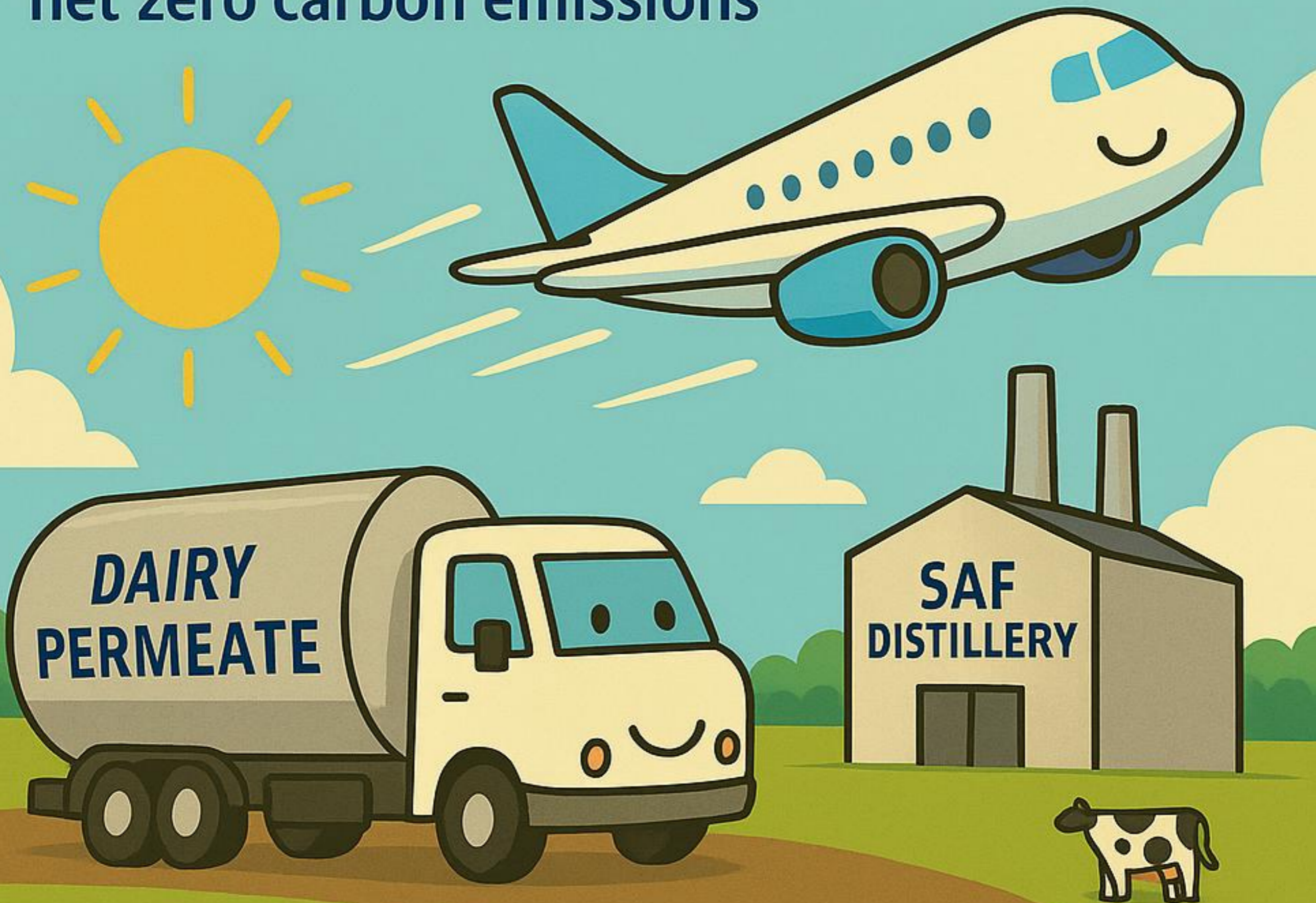


With the right tools, ethanol can be turned into

**SAF:**  
Sustainable  
Aviation Fuel

Making SAF in Wisconsin would  
reduce harm to the planet.

It would help to achieve  
net zero carbon emissions



and create a  
sustainable use for the  
455,000 metric tonnes  
of dairy permeate generated  
in Wisconsin every year;  
dairy by-product that is just  
waste now.



# Moo Magic Math

Let's do the math!



**455,000**  
METRIC TONNES  
OF PERMEATE

**71 MILLION**  
GALLONS  
OF ETHANOL

**42 MILLION**  
GALLONS  
AVIATION FUEL

That's enough for thousands of flights -  
and way cleaner for the planet!

**KEEP US  
SUSTAINABLE**

**WE'RE  
MOOVING  
IN THE RIGHT  
DIRECTION**

**HELP  
THE  
PLANET**



# SAF is Taking Off!



**Wisconsin planes use about 90 million gallons of jet fuel annually.**

**A Wisconsin permeate SAF plant could supply almost half the state's needs**

**Please support an amendment to AB 222 and SB 284 to include dairy permeate in the definition of biomass.**

That's the end of our dairy tale –  
thanks for joining the journey  
from Moo to the Moon!

