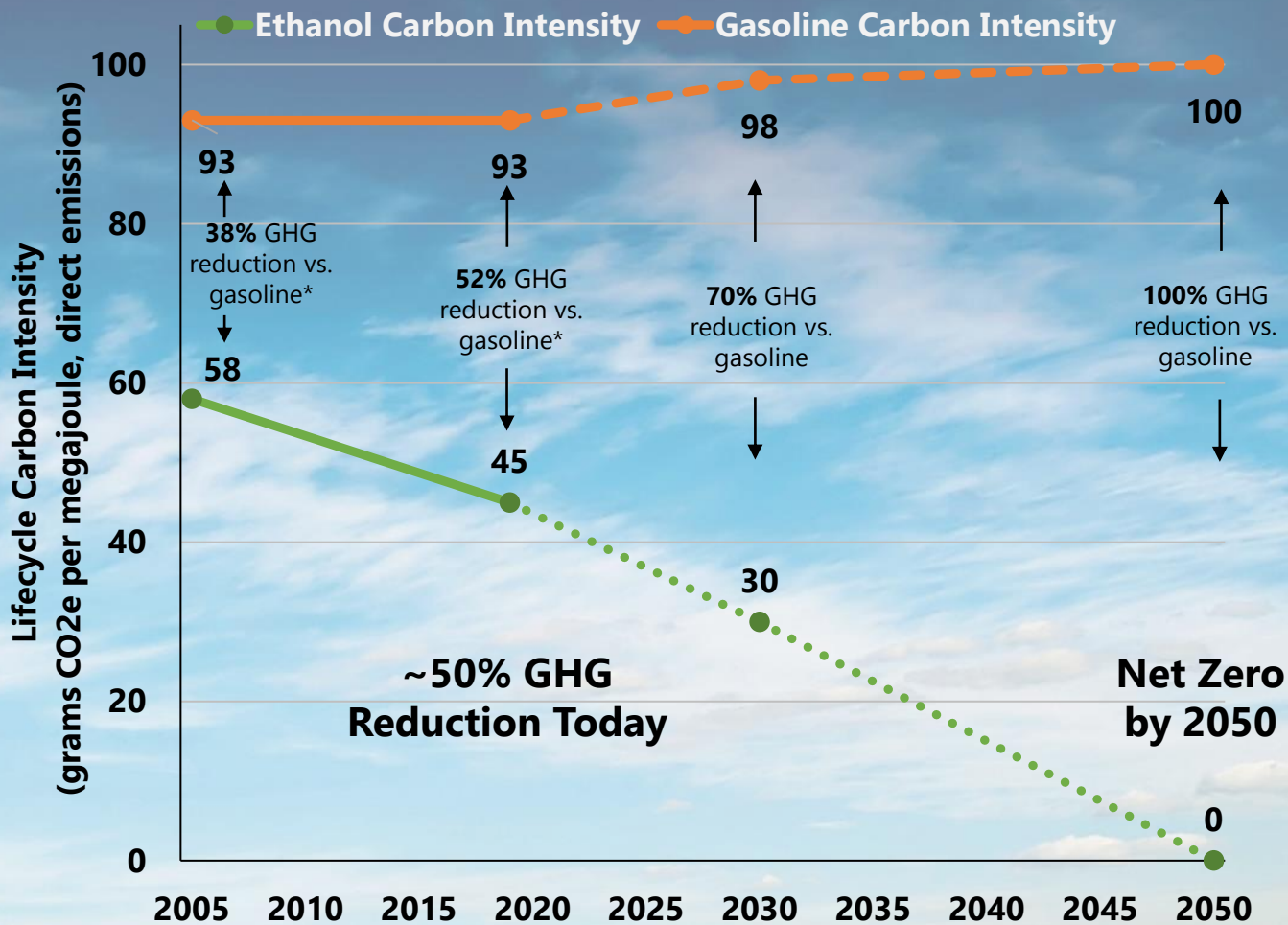


RFA members are committed to ensuring ethanol reduces GHG emissions by **70%** (on average) compared to gasoline **by 2030** and achieving a **net-zero** emissions carbon footprint **by 2050**.

## Actual 2005 and 2019 Ethanol Carbon Intensity and RFA Goals for 2030 and 2050



2005 to 2019:  
23% reduction  
in carbon  
intensity

2019 to 2030:  
30% reduction  
in carbon  
intensity

2031 to 2050:  
100% reduction  
in carbon  
intensity

\*Lee, U., Kwon, H., Wu, M. and Wang, M. (2021), Retrospective analysis of the U.S. corn ethanol industry for 2005–2019: implications for greenhouse gas emission reductions. Biofuels, Bioprod. Bioref.

