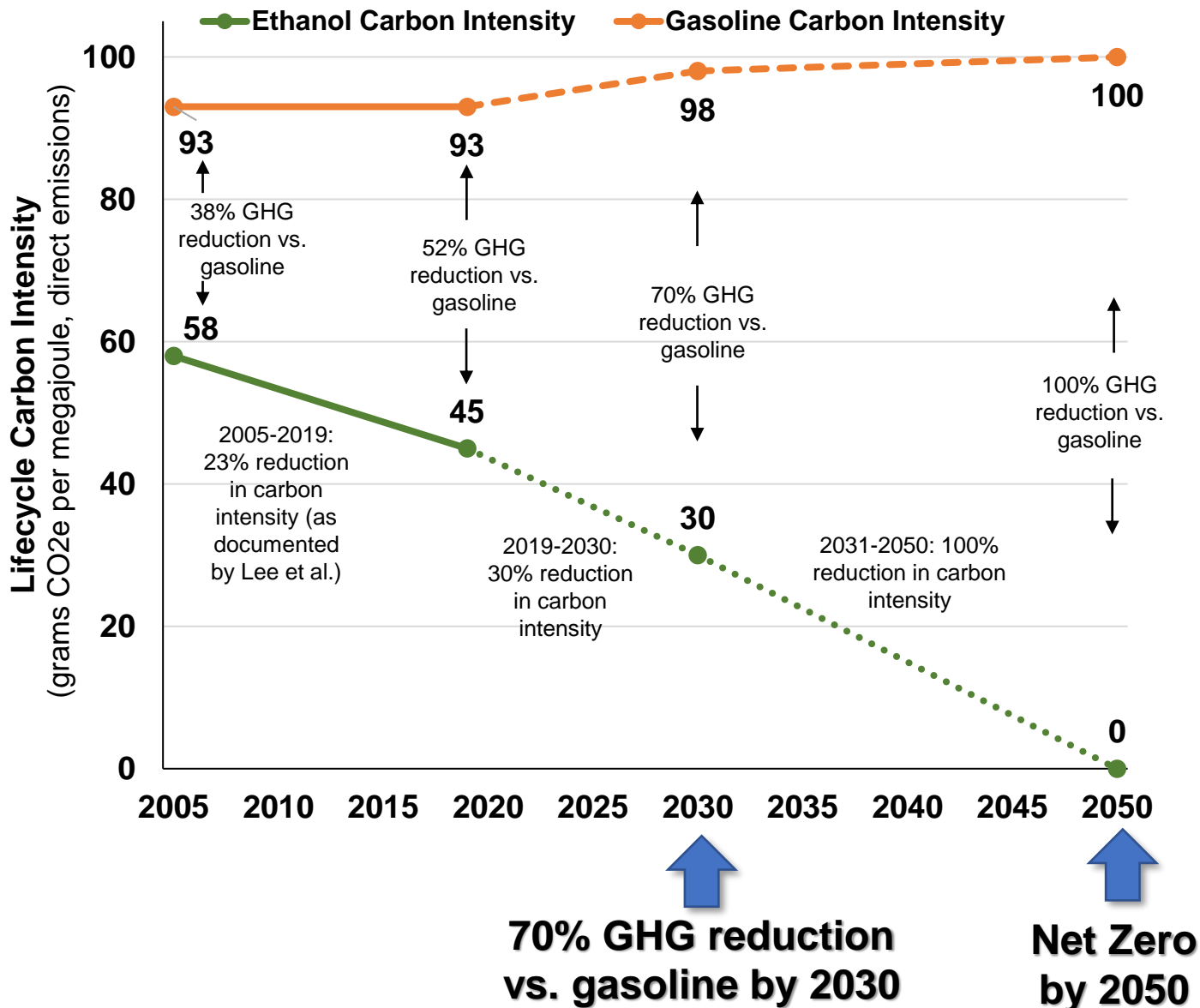


RFA members are committed to ensuring ethanol reduces GHG emissions by **70%** (on average) compared to gasoline by 2030 and achieving a **net-zero** emissions carbon footprint by 2050.

Actual 2005 and 2019 Ethanol Carbon Intensity (DOE-Argonne) and RFA Goals for 2030 and 2050



Sources and Notes:

- Carbon intensity values for 2005 and 2019 gasoline and ethanol from 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.
- Conservatively assumes carbon intensity of gasoline increases 7.5% between 2019 and 2050.