

# Four Ethanol Predictions for the 2020s

*Geoff Cooper*

*Renewable Fuels Association*

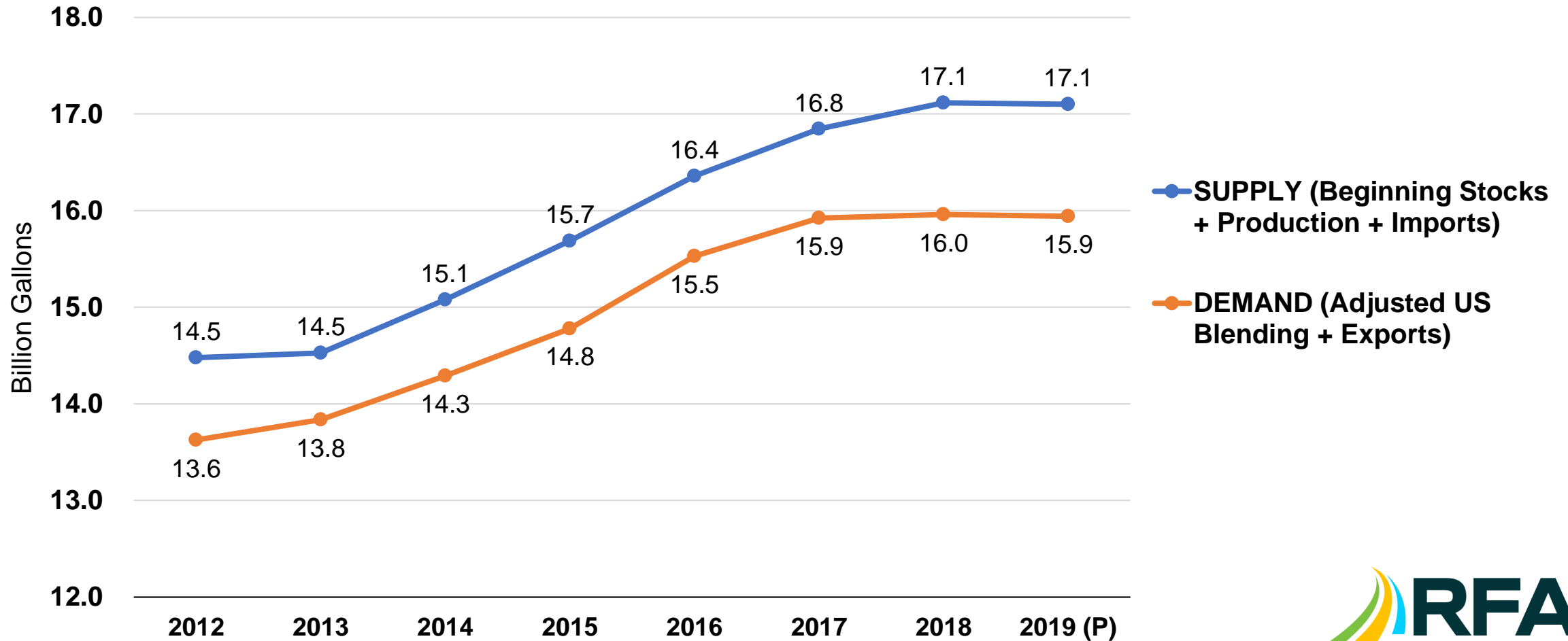


# 2019 Policy and Regulatory Wins

- Year-round E15...without “RIN reform” poison pills
- President Trump visit to Southwest Iowa Renewable Energy
- Reallocation of (some) SREs in RVOs for 2020 and beyond
- Withdrawal of EPA proposal to “reset” 2021-22 RFS volumes
- EPA revisiting 500 MG remand
- Commitment to E15 streamlining and biofuel infrastructure

# SREs + Trade War = Demand Destruction

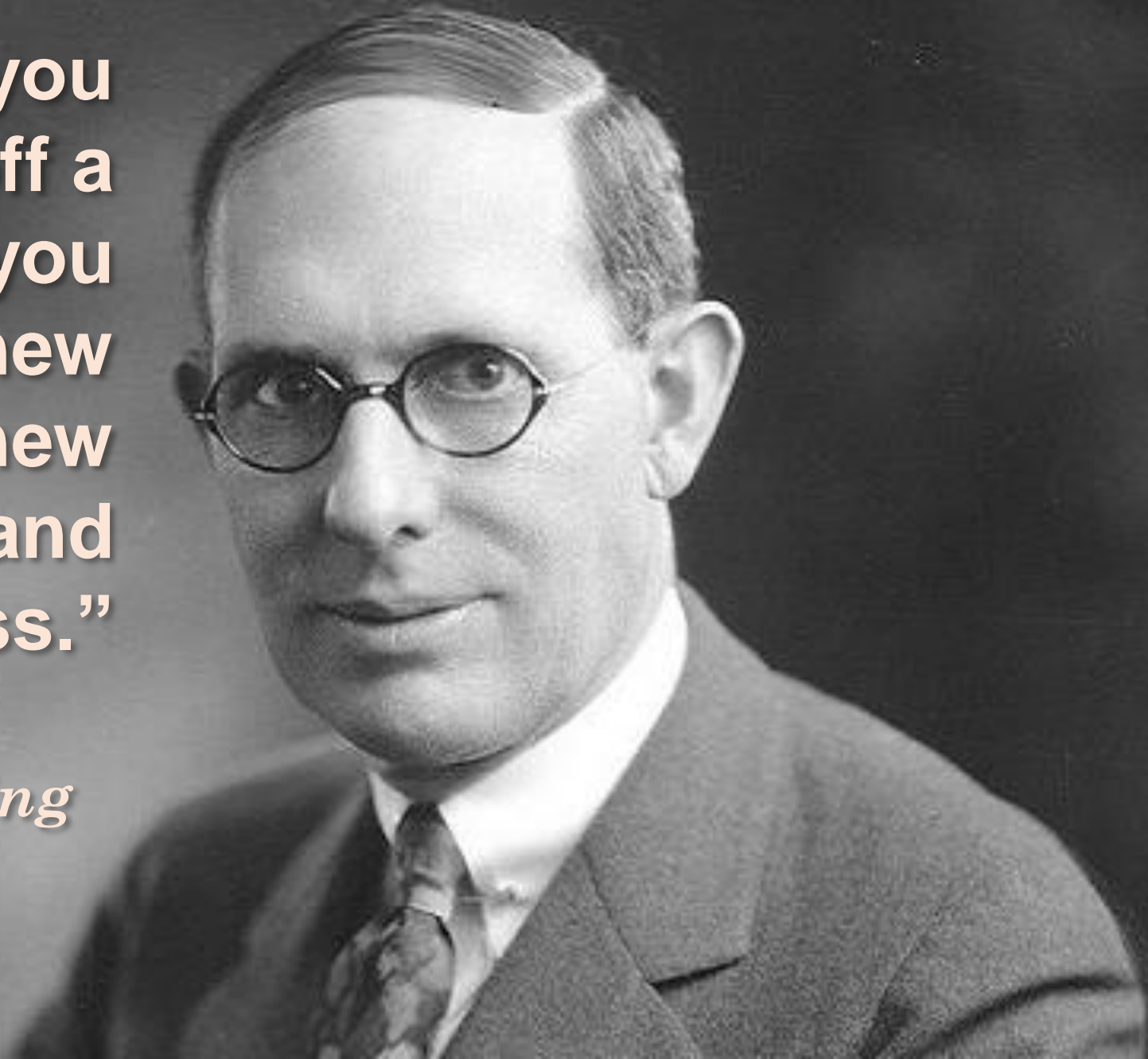
## U.S. Ethanol Supply and Demand



Source: U.S. EIA

**“Every time you  
tear a leaf off a  
calendar, you  
present a new  
place for new  
ideas and  
progress.”**

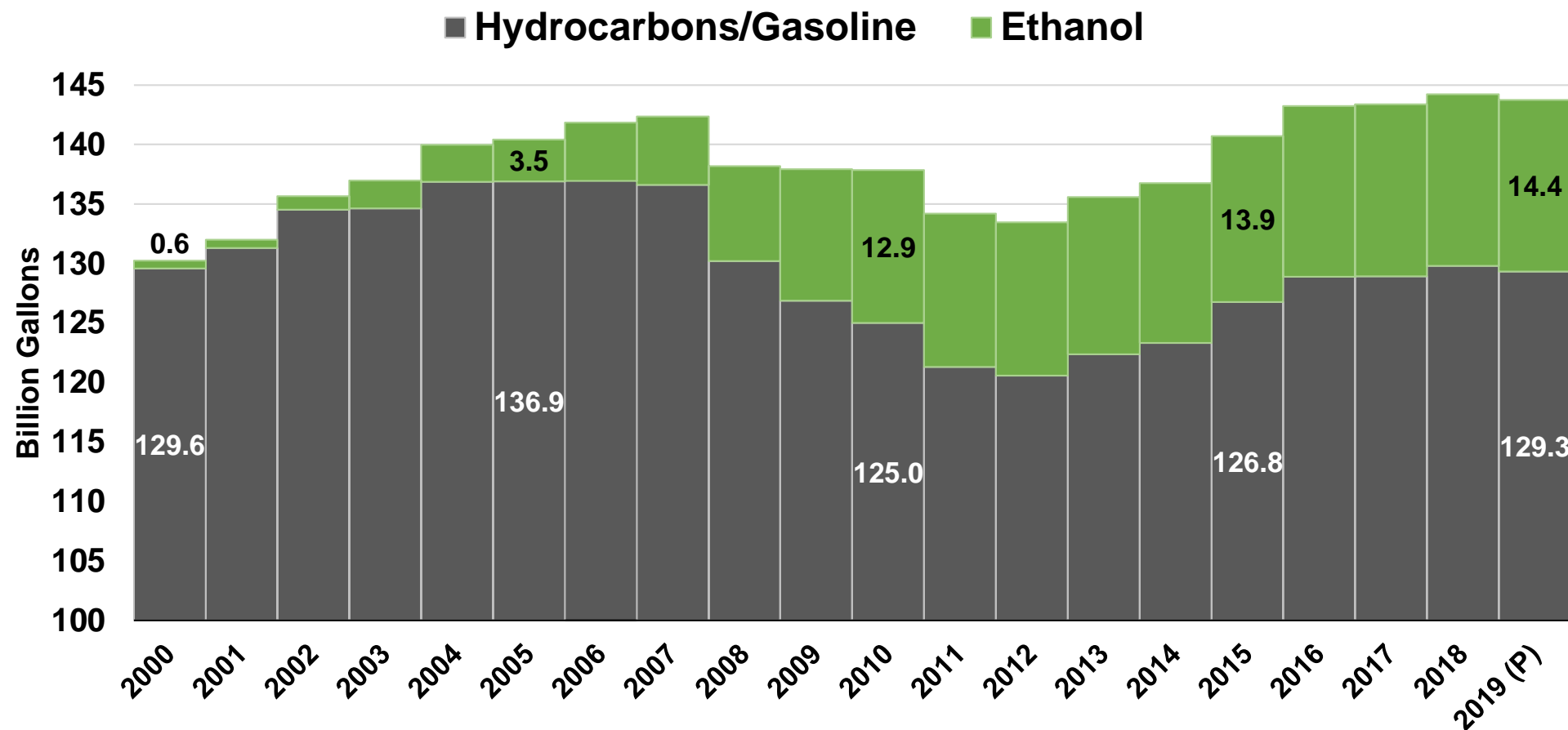
**— *Charles Kettering***



# **1. The RFS Wars Will Continue... and Intensify**

# RFS Provides Market Access

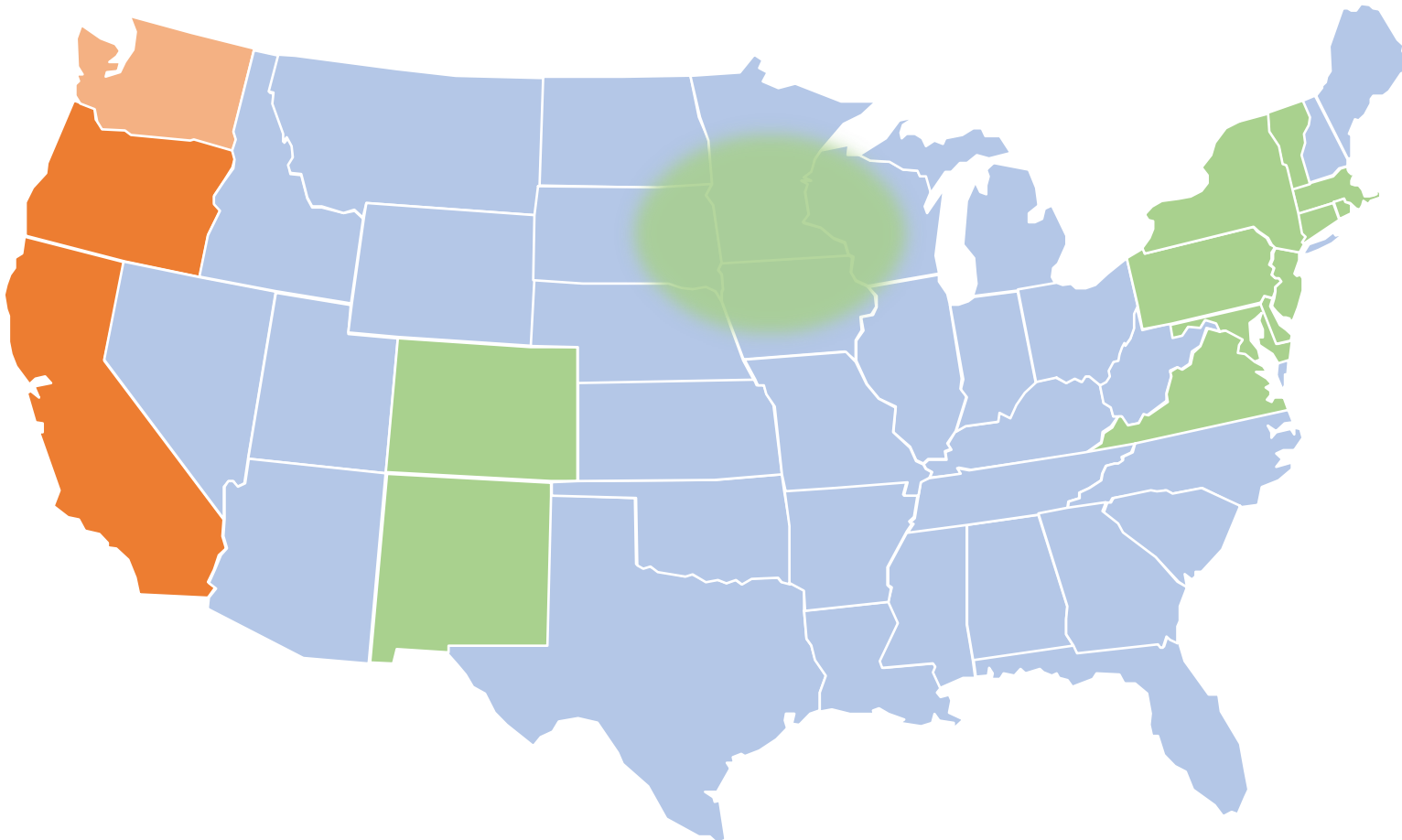
## Composition of U.S. Finished Gasoline



## **2. The LCFS Will Spread**

# State Activity on Low Carbon or Clean Fuel Programs (LCFS/CFP)

■ Program implemented   ■ CFP legislation introduced   ■ Active discussion on CFP development

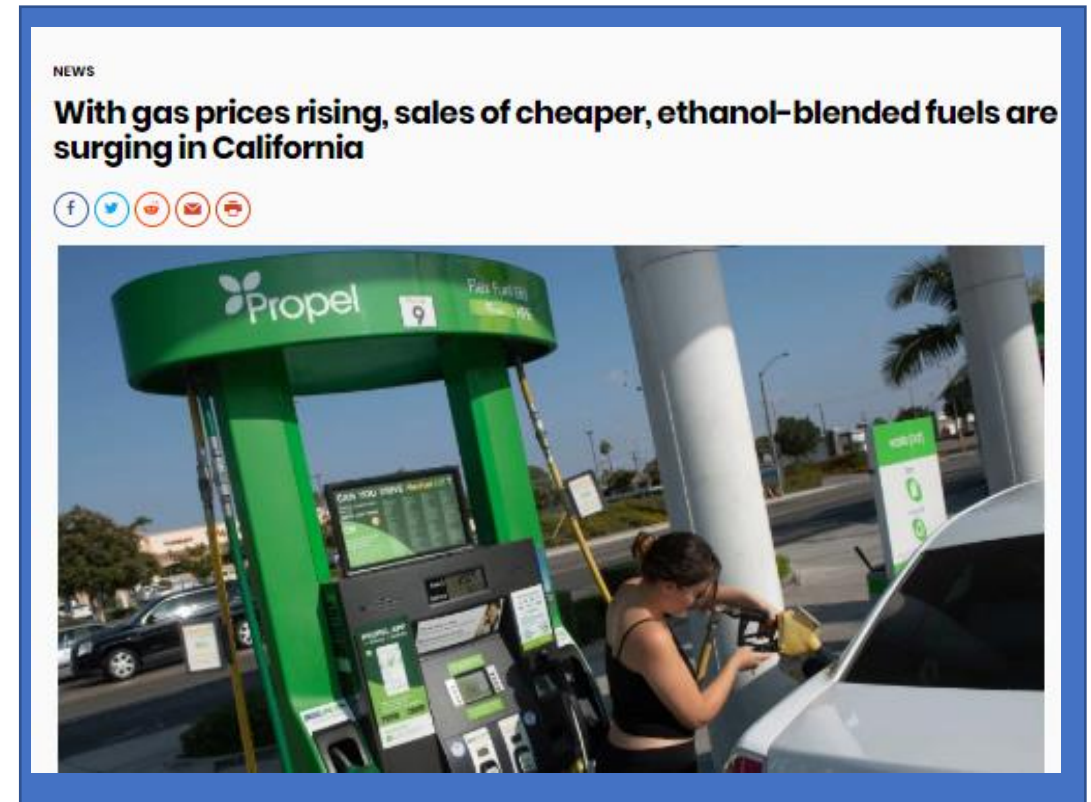
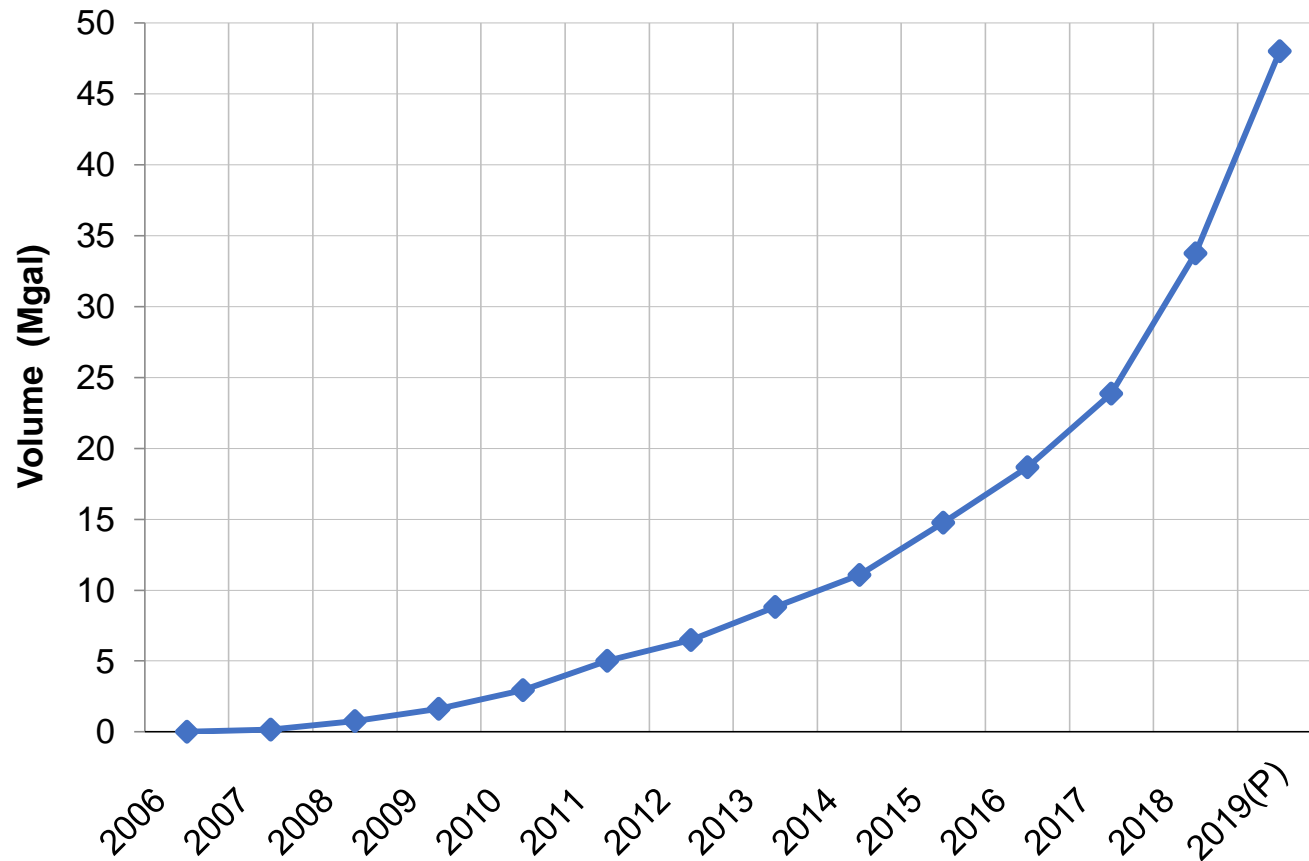


- **California:** Active program since 2010.
- **Oregon:** Active program since 2016.
- **Washington:** CFP legislation introduced.
- **Upper Midwest:** Ongoing stakeholder discussions regarding feasibility and design of a state or sub-regional program.
- **Colorado:** 2018 executive order directing adoption of CA low-emission vehicle standards; ongoing stakeholder discussions on LCFS/CFP.
- **New Mexico:** State Climate Change Task Force evaluating LCFS/CFP as one strategy for reducing GHG and criteria pollutant emissions.
- **Northeast/Mid-Atlantic:** Ten states and D.C. designing a regional LCFS/CFP, led by Transportation & Climate Initiative (TCI) and Georgetown Climate Center.



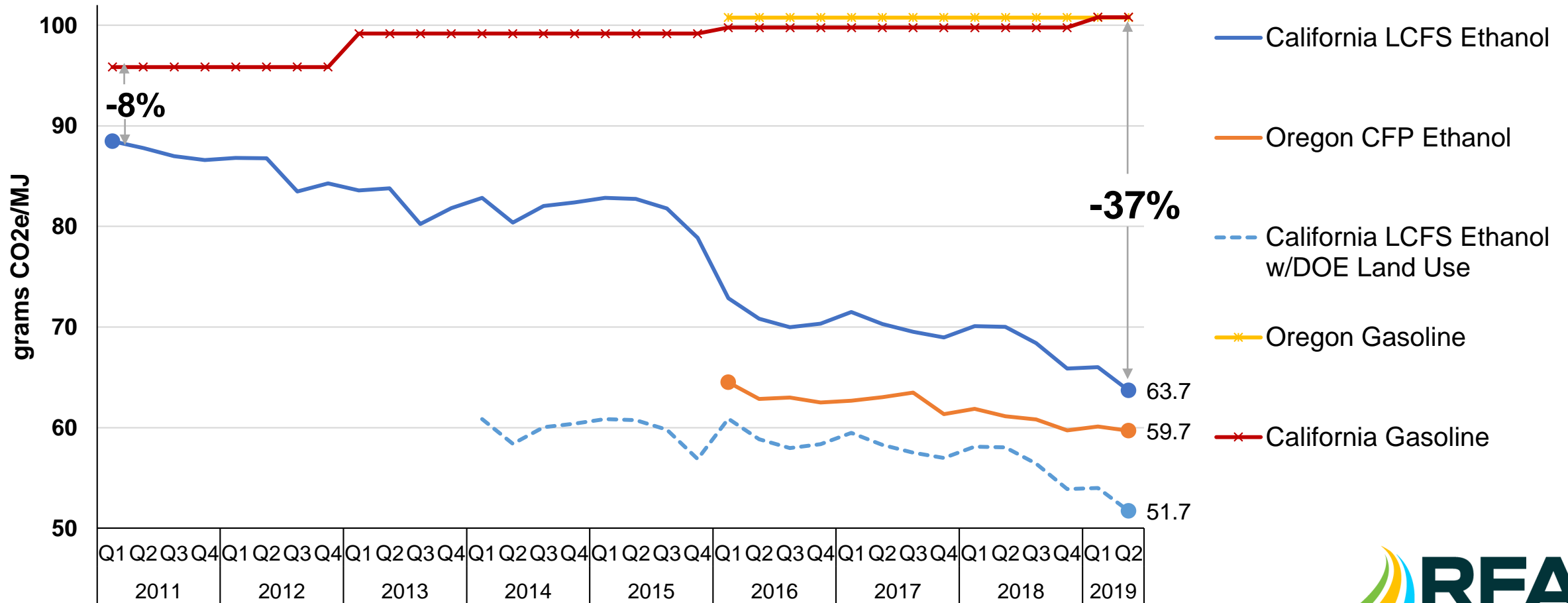
# LCFS Driving California E85 Surge

California E85 Sales Volumes  
(Million Gallons)



# Ethanol Playing Major Role in LCFS

Average Ethanol Carbon Intensity Used Under California LCFS and Oregon CFP



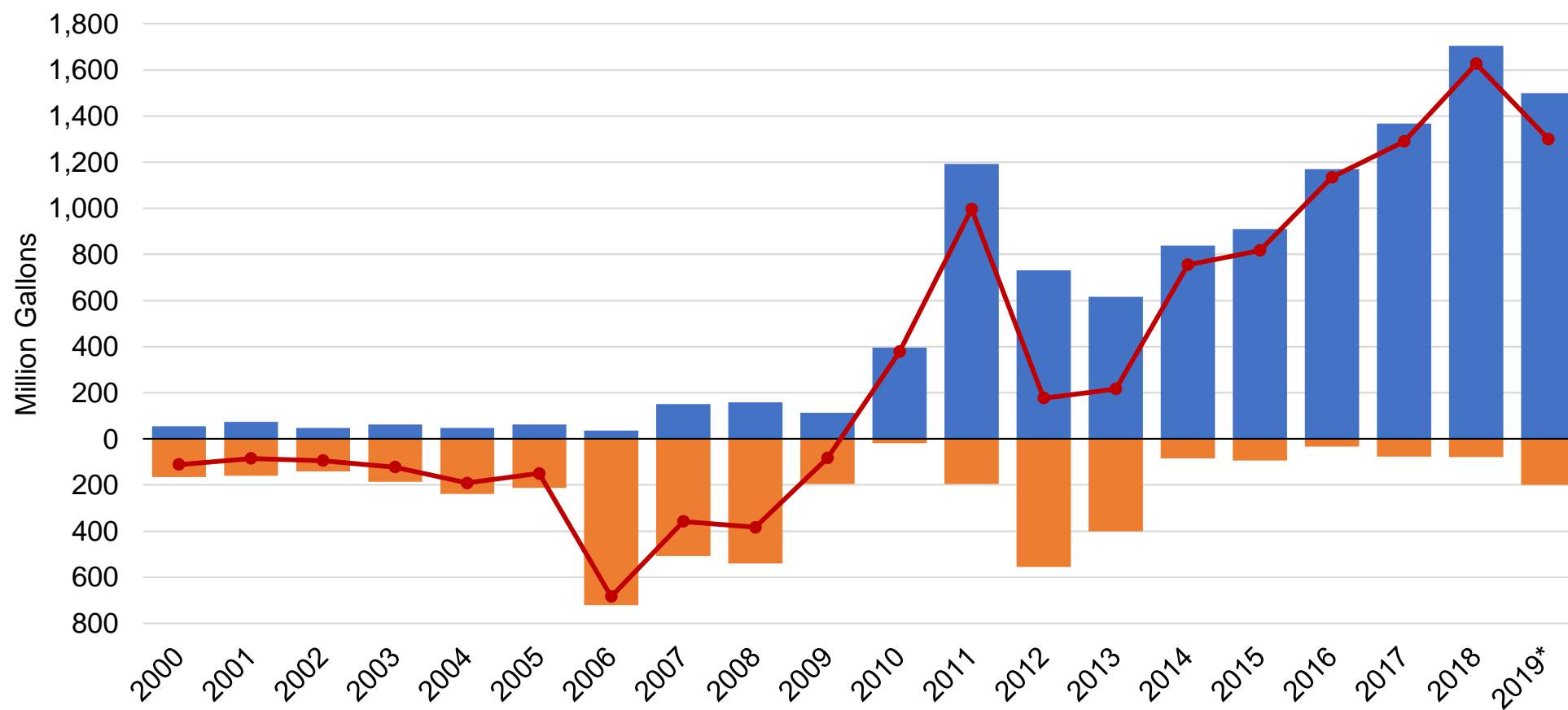
Source: CARB, ODEQ, DOE

# 3. Export Growth Returns

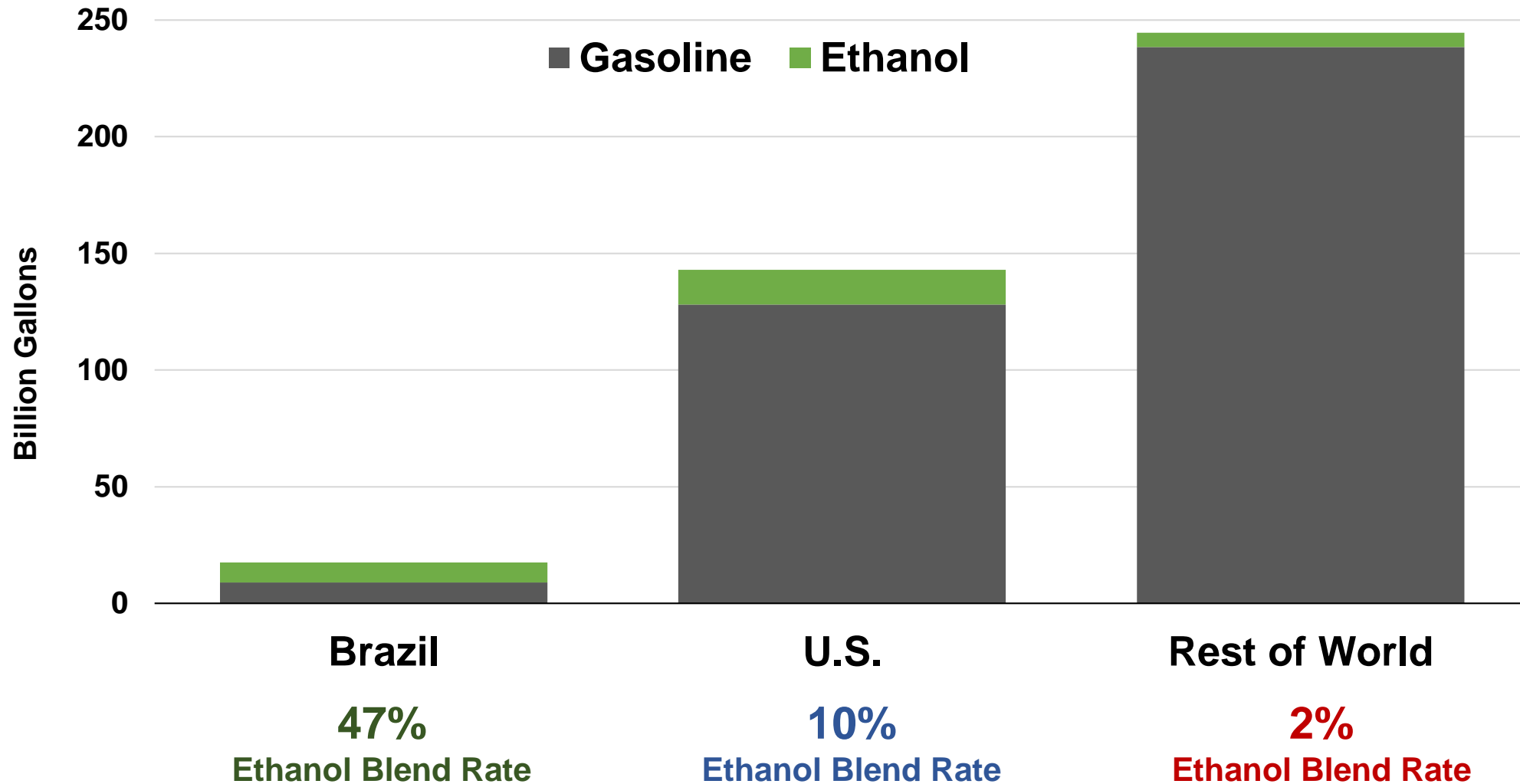
# Ethanol Exports Dip in 2019

## U.S. Ethanol Exports and Imports

Exports Imports Net Exports



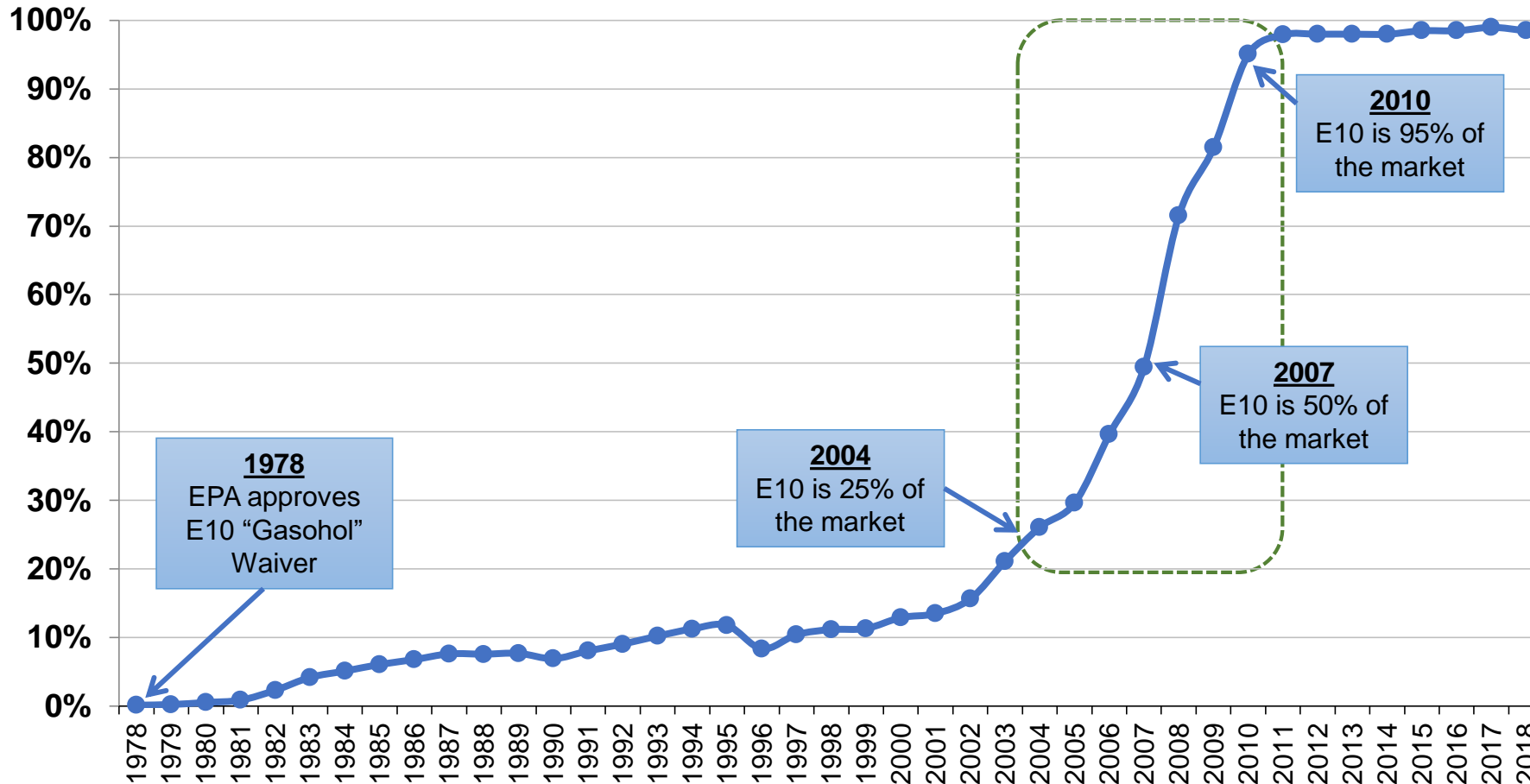
# 2019 Gasoline and Ethanol Consumption



# 4. E15 Becomes the New Regular

# What Will Cause E15's Hockey-Stick Moment?

## E10 Share of the U.S. Gasoline Market



- It took ~**25 years** for E10 to penetrate **25%** of the gasoline market.
- The next **25%** took just **three years**.
- The next **50%** took just **three more years!**