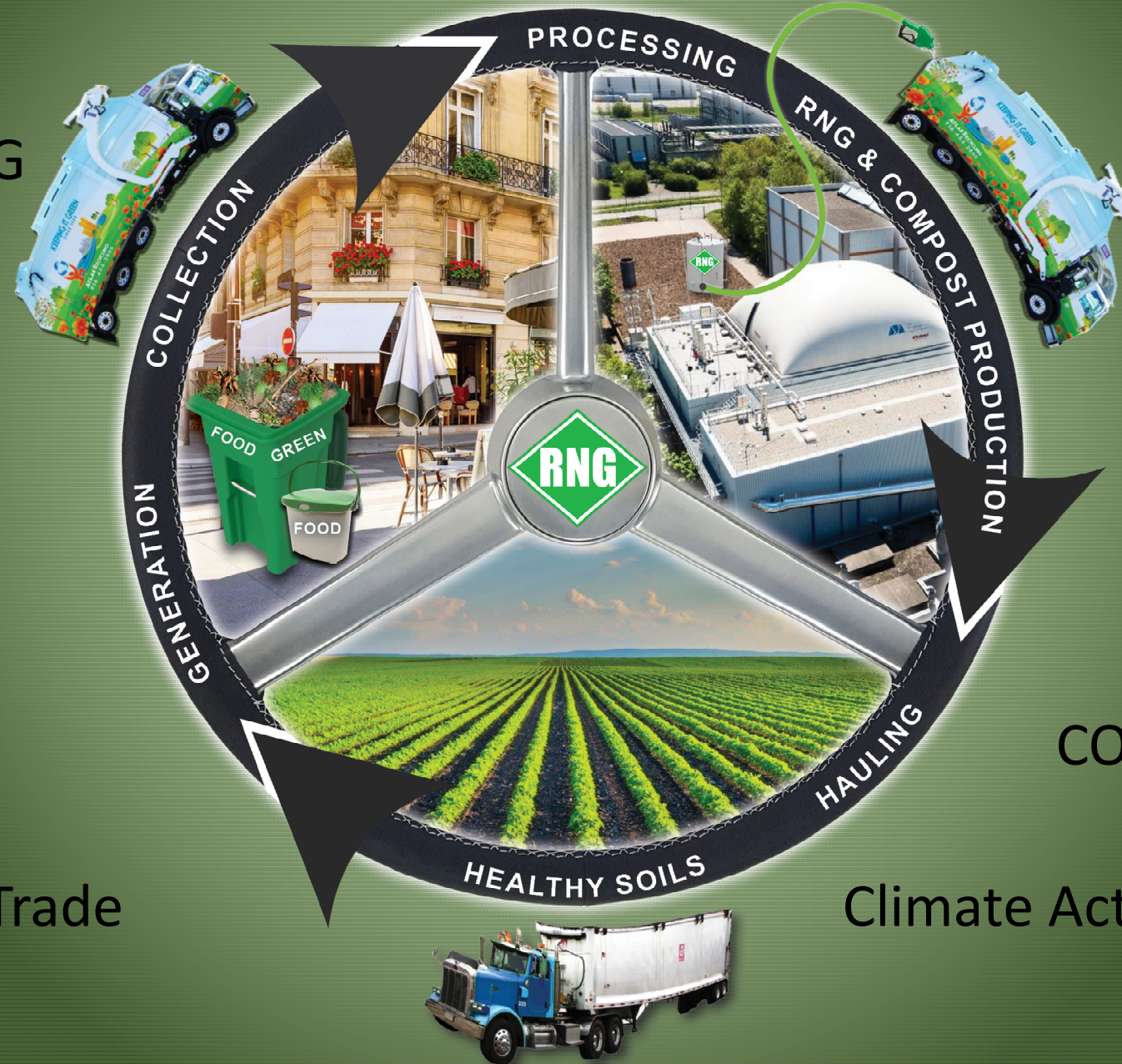


Biomass In the Wheelhouse of the Circular Economy



Net-Zero GHG

LCFS/RFS

Renewable
Portfolio
Standard

SB 1383

IRA -
COMPOST
Act

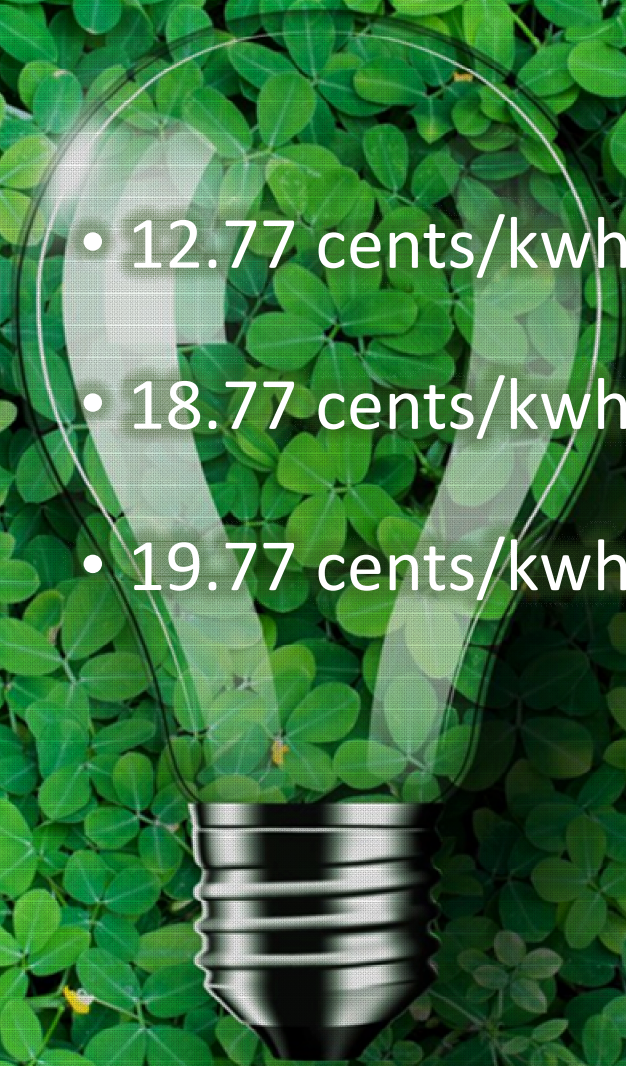
Cap-and-Trade

Climate Action Reserve



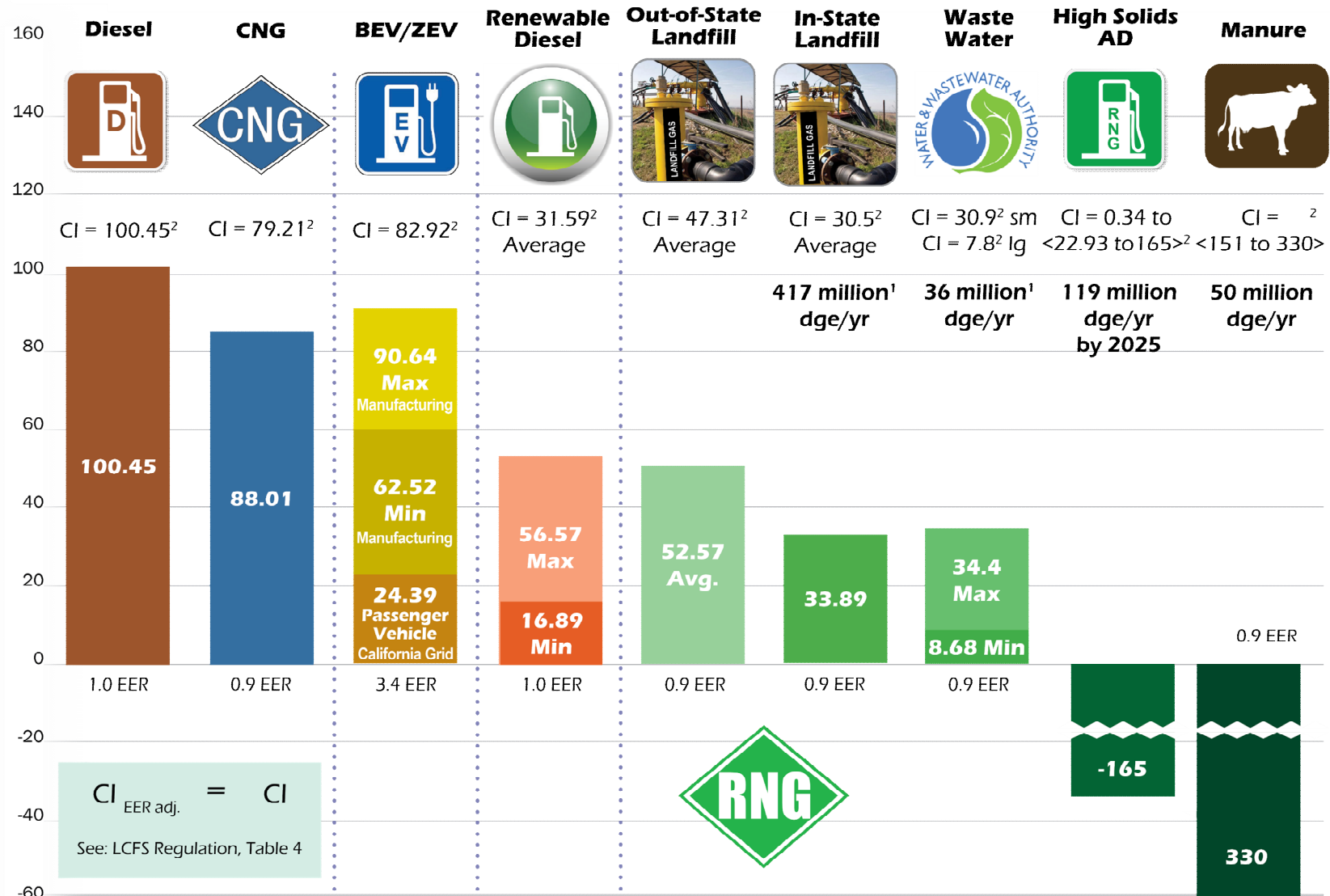
BioMAT Program for Electricity Sales

- 12.77 cents/kwh for Urban Waste/100 MW
- 18.77 cents/kwh for Ag Waste/ 90 MW
- 19.77 cents/kwh for Forest Waste/50 MW

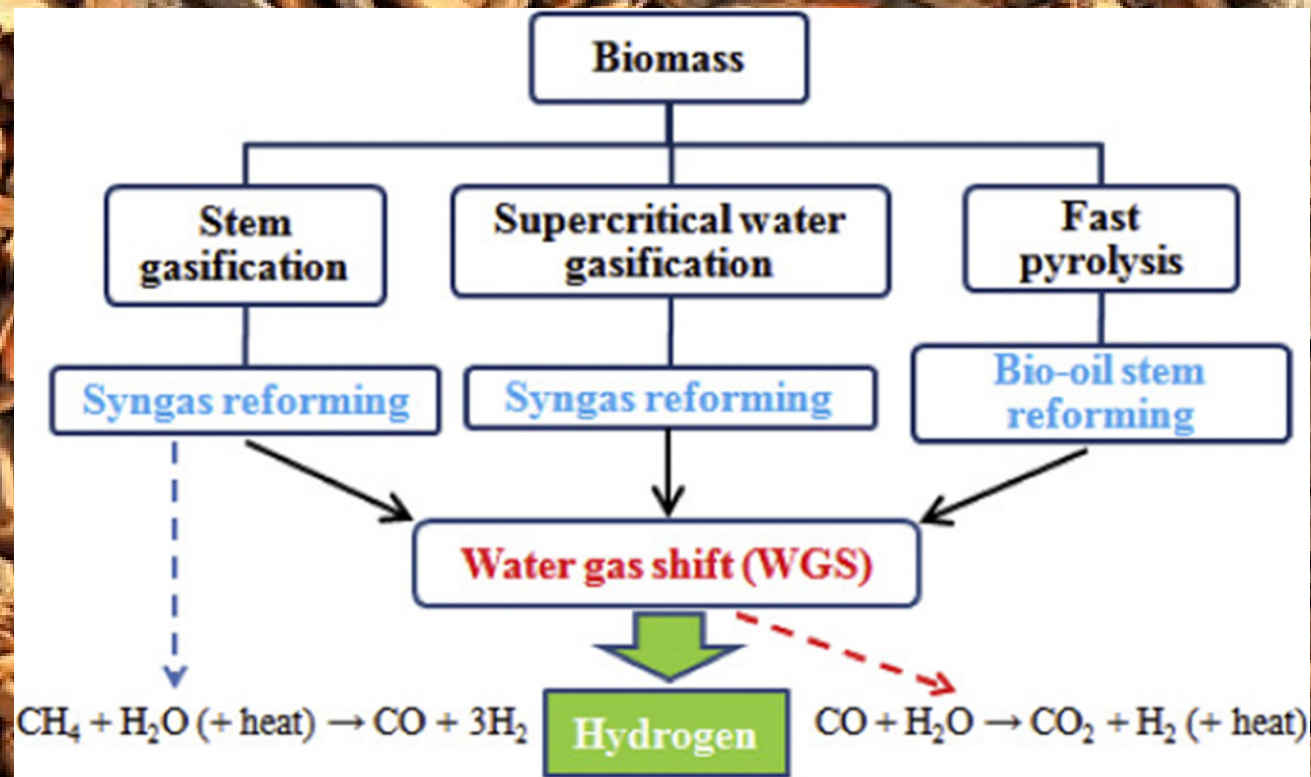


Carbon Intensity for Diesel & Substitutes

grams CO₂ emitted per unit of energy adjusted for energy economy ratio [EER] (g CO₂ e/MJ)



¹ UC Davis; ² Adopted LCFS Regulations



ANAEROBIC DIGESTION FACILITY



FARM



COMPOST

BIOGAS

**FOOD WASTE/
GREEN WASTE**



**COMMUNITY SCALE
CARBON NEGATIVE
FLEET**

**BIOGAS CONDITIONING
AND COMPRESSION**



CNG GARBAGE TRUCK



RESTAURANT

Agricultural Composting – under 12,500 CYD CalRecycle

- under 25,000 CYD – Water Board
- Agricultural Exemption – Land Use/Climate Action Plans
- Windrows or BACT – APCDs/AQMDs ???



Carbon Farming

One Ton of Compost sequesters 0.54 Tons of Carbon

healthy soil has amazing water-retention capacity.



Every

1%

increase in organic matter results in as much as

25,000

gal of available soil water per acre.

Source: Kansas State Extension Agronomy e-Updates, Number 357, July 6, 2012



Want more soil secrets?
Check out www.nrcs.usda.gov

USDA is an equal opportunity provider and employer.

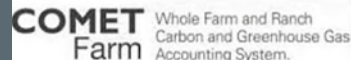
COMET-Farm & COMET-Planner

Tools for Conservation Planning and Greenhouse Gas Mitigation in Agriculture and Forestry

COMET-Farm and COMET-Planner

COMET Team

Paustian Research Group
Natural Resource Ecology Laboratory
Colorado State University
Fort Collins, CO



Carbon and greenhouse gas evaluation for NRCS conservation practice planning

Voluntary Carbon Off-sets



CLIMATE
ACTION
RESERVE

— 2001-2021 —

- Corporate Sustainability Programs
- CARB may eventually adopt as regulatory off-set
- Protocols
 - Organic Waste Composting Facilities
 - Organic Waste Digestion Facilities
 - Soil Enrichment 1.0/2.0
 - Biochar

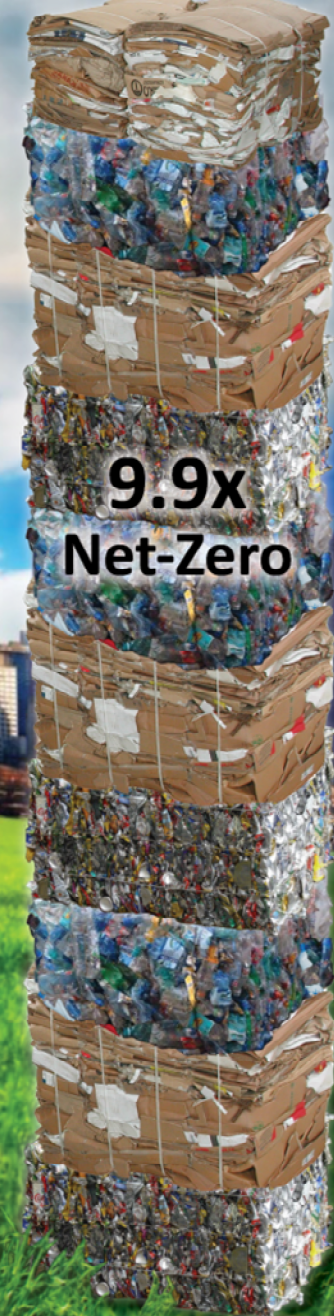
Achieving Net Zero GHGs in the Solid Waste Industry



**3.7x
Net-Zero**

2018

**Presented By:
Evan Edgar**



**9.9x
Net-Zero**

2030

