#### **HB** 3386

April 5, 2017

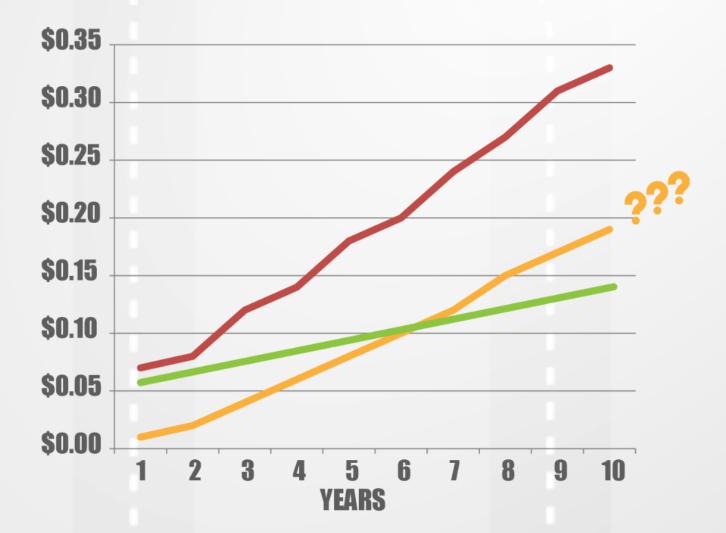
House Energy & Environment Committee



#### THE CONCERNS:

Impact on transportation package Impact on low income Oregonians who drive cars Failure to achieve CO2 reduction at rational cost





### GAS TAX + EST. LCFS COST LCFS INCREASE IN COST PER GALLON



## THINGS TO HELP **LCFS**



- 1. Adopts a \$75 per metric ton cost containment measure
- 2. Establishes direct pathway to green investments
- 3. Provides for transparency



### To understand HB 3386, we need to discuss the LCFS.



## Proponents argue that Oregonians will continue to drive liquid fuel cars

But, this can only happen if someone invents a new liquid low carbon additive.



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### BY THE NUMBERS







# 3.5 MILLION CARS & LIGHT TRUCKS



### 34,634 HEAVY TRUCKS



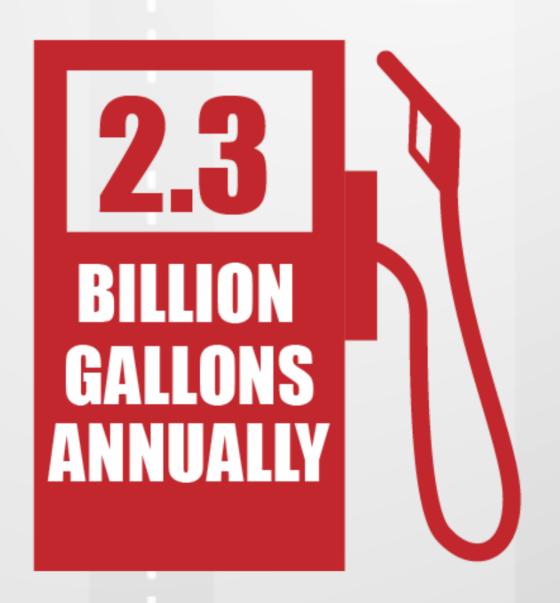


#### Oregonians Burn Approximately











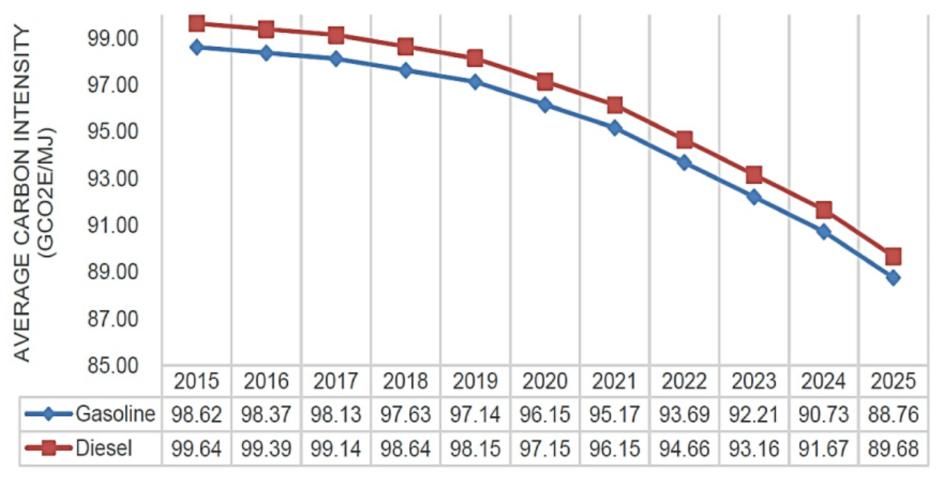
Beginning in 2015, the LCFS began to force a 10% reduction in carbon contained in this 2.3 billion gallons of fuel.

VERAGE CARBON INTENSITY (GCO2E/MJ)





#### **CLEAN FUELS STANDARDS**



Slide prepared by Rep. Bentz's office---calculations & estimates should be verified before being quoted.



### 2024 2025 88.76 1.67

## Reductions in carbon intensity of gasoline are achieved by "BLENDING"

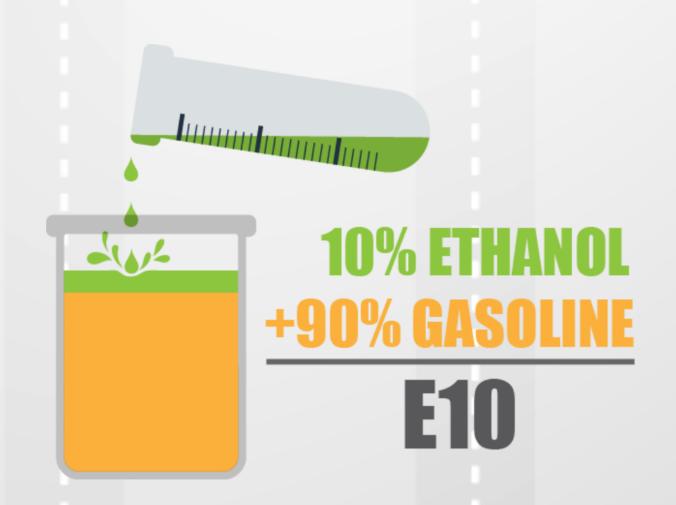


### 1 Gallon of 100% Gasoline

Carbon Intensity:

100.77 gC02e/MJ

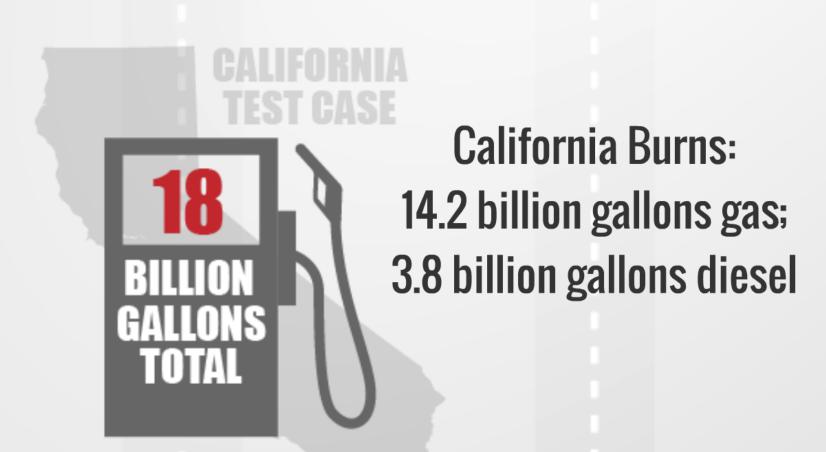












This cost Californians 630 million dollars last year. (at .0335 per gallon)





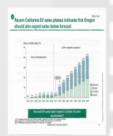


#### Beginning in 2010, California initiated its LCFS attempting to force CO2 reduction in its 18 billion gallons of fuel.

This cost Cali million dolla (at .0335)



# This cost Californians 630 million dollars last year. (at .0335 per gallon)



This cost is estimated to double next year and double again each year thereafter



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Hopefully, this massive amount Californians are spending will lead to the development of lowercarbon liquid fuel.



## Unless this happens, Oregonians and Californians will run into the so-called





A "BLEND WALL" occurs when gas and diesel can no longer be blended with something else to achieve compliance with the LCFS.

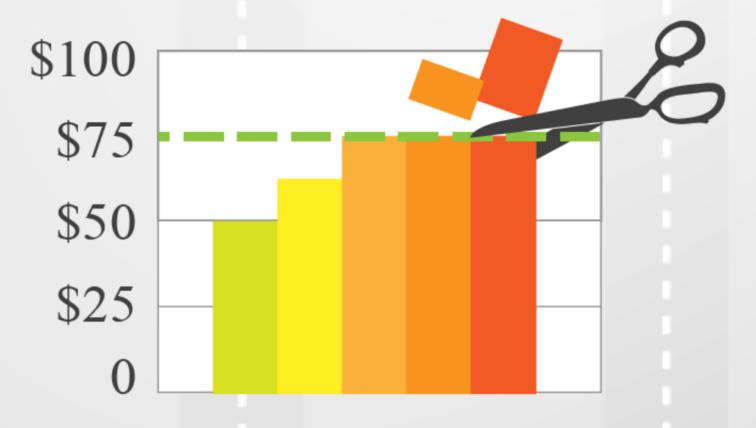


## When we hit the blend wall, the cost of what little fuel does comply with the LCFS will skyrocket.

What we need is...
Cost Containment



#### COST CONTAINMENT





Cost containment protects against crazy swings in the price of fuel ("VOLATILITY"), which ultimately damages the LCFS, not to mention the consumer.



# "In the first three quarters of 2015, California Low Carbon Fuel Standard credits increased in price by 212%."

-Ethanol Producer Magazine



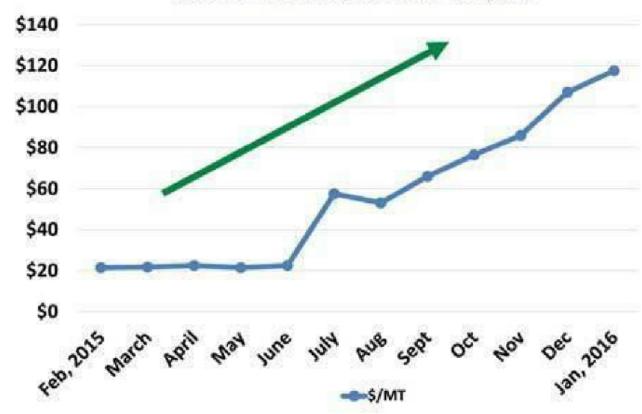
1.

2



#### **LCFS Credit Prices**

Quoted in Dollars per Metric Ton (MT)



Avg. 2014 price was \$31. Source: CARB.

(Most recent cost=\$85—it's volatile)

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### The "Fixes" for the problems caused by the Blend Wall:

1. Forgiving deficits (thus allowing utilization of non-complying fuel); or

2. Delaying/postponing imposition of the scheduled lower standard.



## How much will the LCFS cost Oregonians?



## According to the DEQ, somewhere between \$0.04 - 0.19 / gallon per year until 2025



Even at just California's current rate of \$0.03/gallon... Dregorians would pay





## \$0.19 X 2.3 BILLION GALLONS 5437 MILLION **AYEAR**



## Even at just California's current rate of \$0.03/gallon... Oregonians would pay

\$77 MILLION



### Why not let the DEQ set the rules?

## Because the DEQ will set the same cost containment as California...

Which is \$200/Ton of CO2 avoided... (which is rumored to reach \$300-\$400/ton... \$0.30 - 0.40/gallon)





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### If Oregon follows suit, as some Oregon environmental groups will ask, and raises the cap to 400.00...



### \$0.40 x 2.3 BILLION GALLONS \$920 MILLION

**EACH YEAR!!!** 



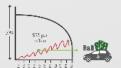
#### THE ALTERNATIVE:

Invest, right now, these LCFS monies in alternative fuel vehicles and/or R&D.



# THAT'S WHAT HB 3386 DOES.





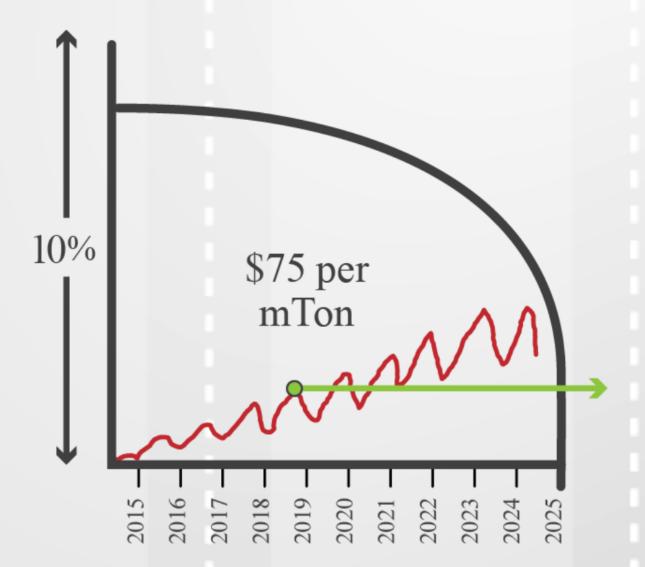
















## Allows us to reduce CO2 immediately while letting the LCFS continue to work.

Imposes an effective cap of \$75 per ton on the program and creates a "Credit Window."



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This method for LCFS cost containment is mentioned approvingly by Researchers at UC-Davis



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# Regulated parties (RP) can purchase needed credits for \$75 ea.

(or purchase for less from the market)



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#### \$75/per ton credits go to:





### The \$75 / ton Cap

\$0.08 PER GALLON

X 2.3 BILLION GALLONS

\$184 MILLION
PER YEAR



### HB 3386 allows NGO's to invest this money in R & D, mass transit, and alt. fuel vehicles.



## **ASSUME CREDIT FOR** ELECTRIC



Oregonians can drive true TRANSFORMATION...

HB 3386 proposes to designate half of the public purpose charge to go into electric cars & infrastructure

#### THIS IS TRANSFORMATION

\$75 MILLION BERTANDA +\$184 MILLION BRATE \*\* \$259 MILLION BRATE \*\* \$5,000 BRATE BRATES =51,800 ELECTRIC CARS



### \$184 MILLION \$5,000 =36,800 **ELECTRIC CARS**



## Oregonians can drive true TRANSFORMATION...

HB 3386 proposes
to designate half of the
public purpose charge to go into
electric cars & infrastructure



#### THIS IS TRANSFORMATION

\$75 MILLION (1/2 THE PURPOSE + \$184 MILLION (\$75 PER TON CREDIT)

\$259 MILLION (NEW TOTAL GOING TO ELECTRIC CARS)

\$5,000 (CREDIT FOR ELECTRIC CARS)

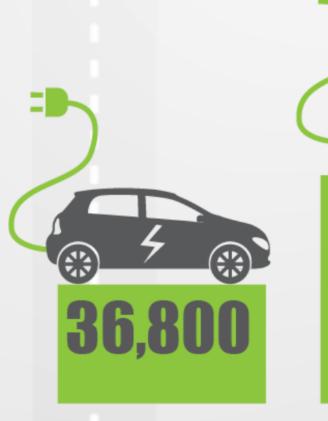
=51,800
ELECTRIC CARS
(PER YEAR)

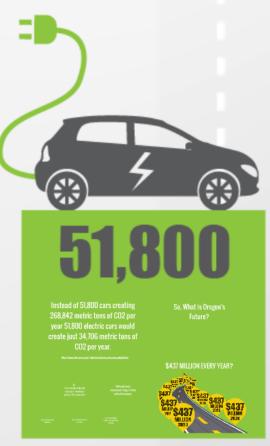






### HOW MUCH GOOD WILL THIS DO FOR THE ENVIRONMENT?









### Instead of 51,800 cars creating 268,842 metric tons of CO2 per year 51,800 electric cars would create just 34,706 metric tons of CO2 per year.

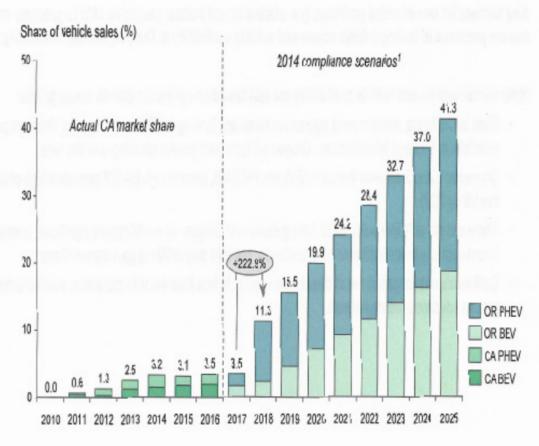
http://www.afdc.energy.gov/vehicles/electric\_emissions.php#wheel



# Without direct investment, Oregon's fleet will not transform.

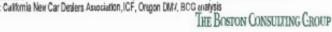


### Recent California EV sales plateau indicates that Oregon should also expect sales below forecast



How will EV sales meet targets in a lower oil price environment?

 2017 compliance scenario PEV sales volumes unavailable. Expected to be similar to 2714 compliance scenarios. Notes: Scenario 1-85. current market share for Oregon unavailable, fleet composition ~0.3% EV in 2016. Scurse: California New Car Deslers Association, ICF, Oregon DM7, BCG analysis.





## So, What is Oregon's Future?



#### \$437 MILLION EVERY YEAR?





# Or... 100s of millions directly invested in immediate and real CO2 reduction?



## And protection of the consumer...

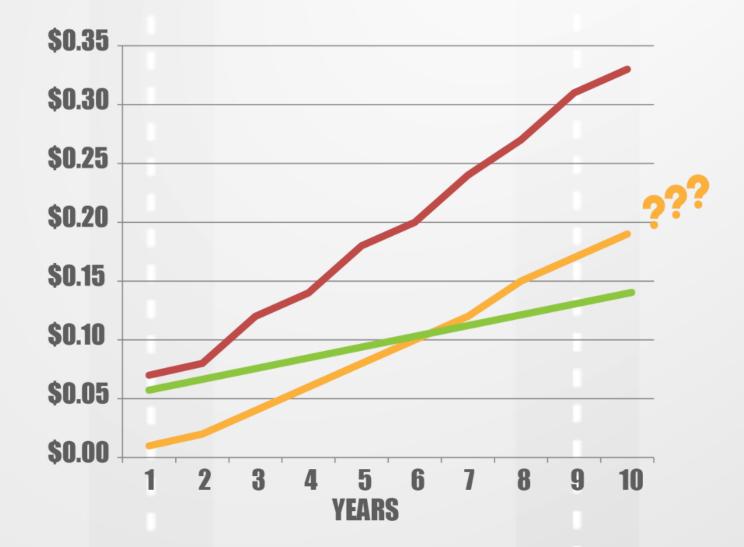


## and real transformation of our fleet...



# and let's not forget Oregon's transportation package!





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