

Discussion of Policy Ideas Relating to Electric Vehicles

**Overview: Economic and Environmental
Benefits of Electric Vehicles**

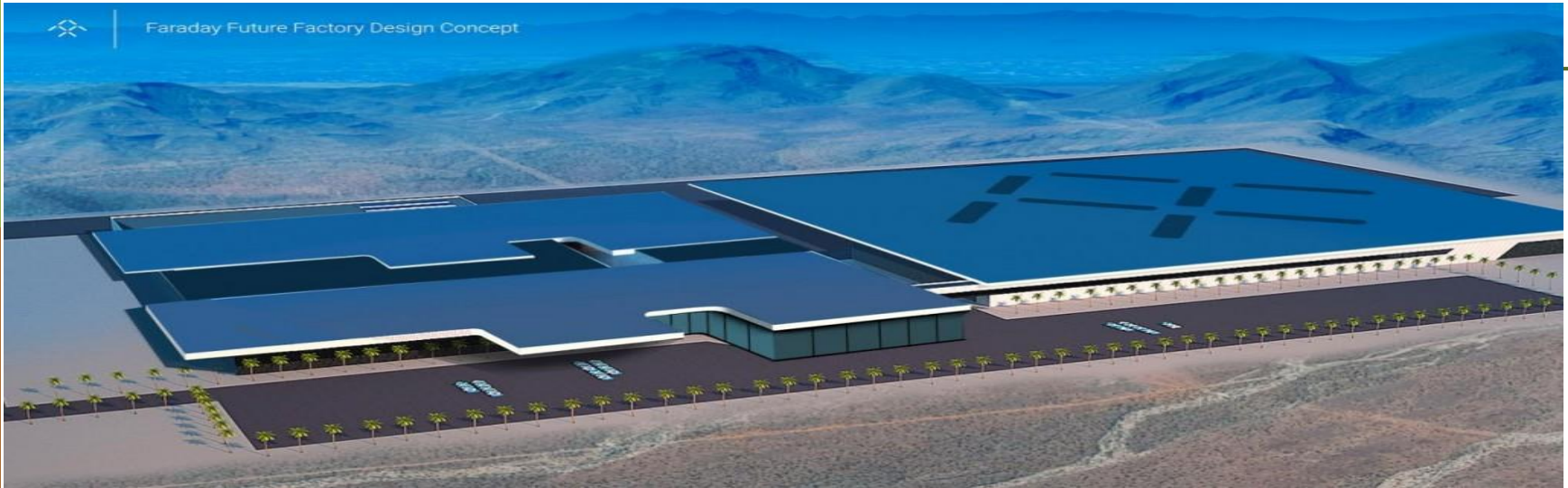


**Overview/ Presentation to the Clean Energy Technical Advisory Committee
Governor's New Energy Industry Task Force**

May 2, 2016

**Presented by Tom Polikalas
Southwest Energy Efficiency Project (SWEET)**

Nevada, A Clean Tech Leader



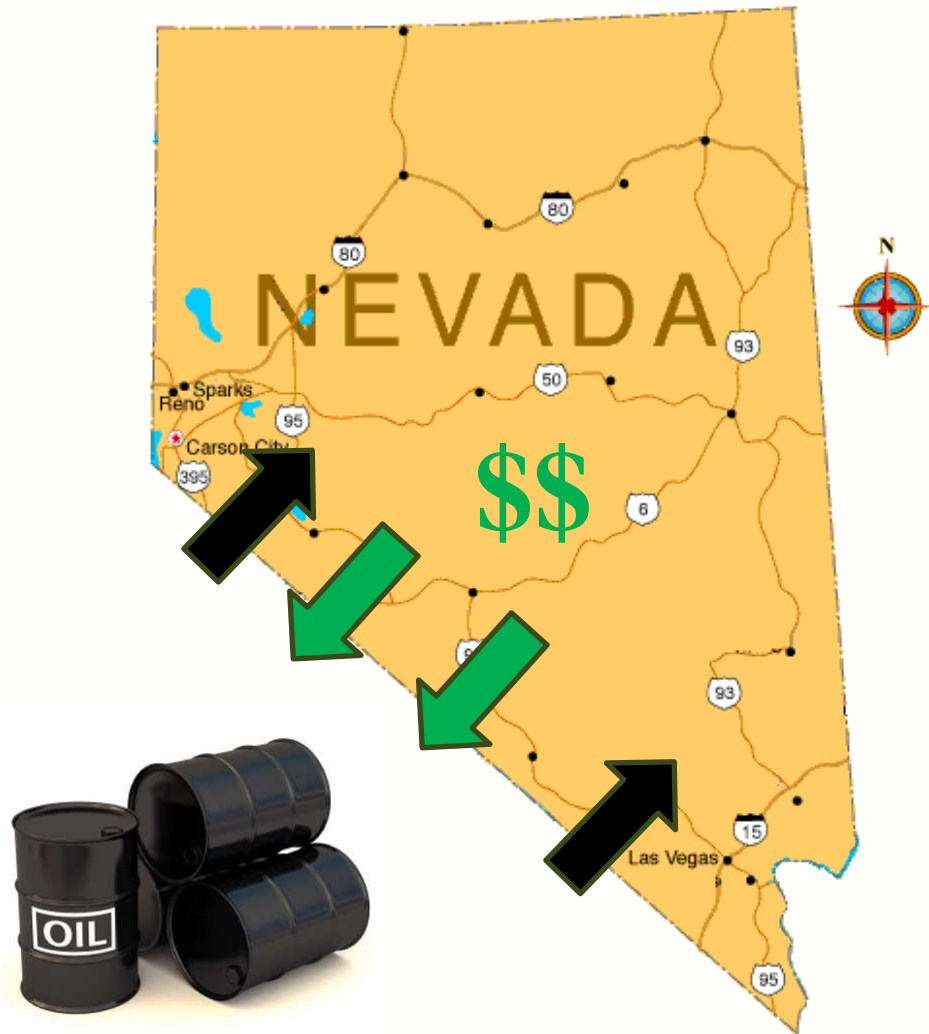


“The best ways to reduce oil intensity are to bring to bear a diversity of fuels in the transportation sector, and this is best achieved by the electrification of transportation.” —Retired Air Force Gen. Charles F. Wald, member, Energy Security Leadership Council, and former deputy commander, U.S. European Command.



This International-built hybrid-electric combat vehicle is part of a US\$60 million "Future Tactical Truck System" (FTTS) evaluation program being conducted by the U.S. Pentagon. The 18,500 pound (kg) truck is powered by a hybrid-electric engine that is positioned in the rear, allowing more room in the cab.

\$4 Billion of Imported Oil vs Local Renewables



Geothermal

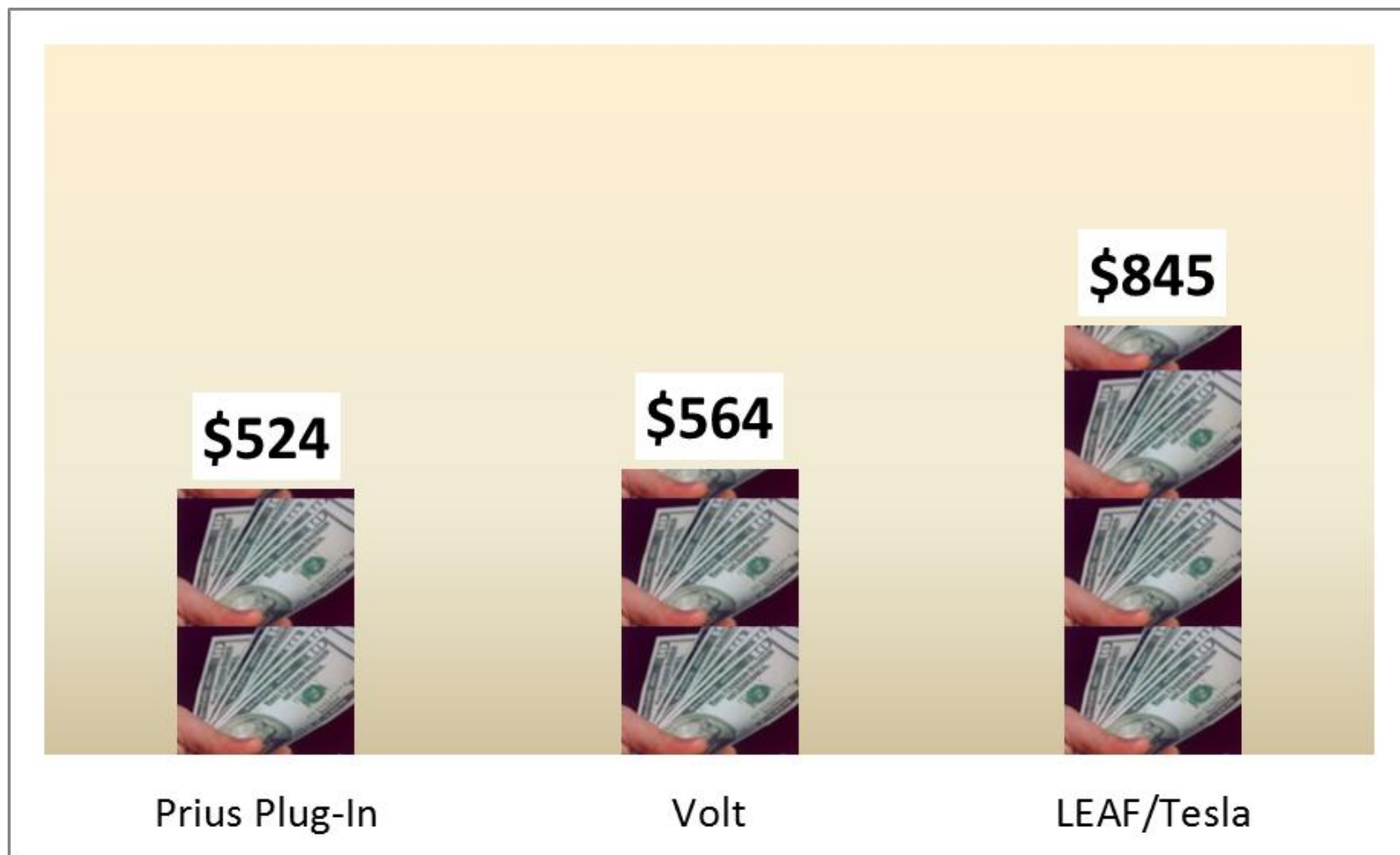


Solar

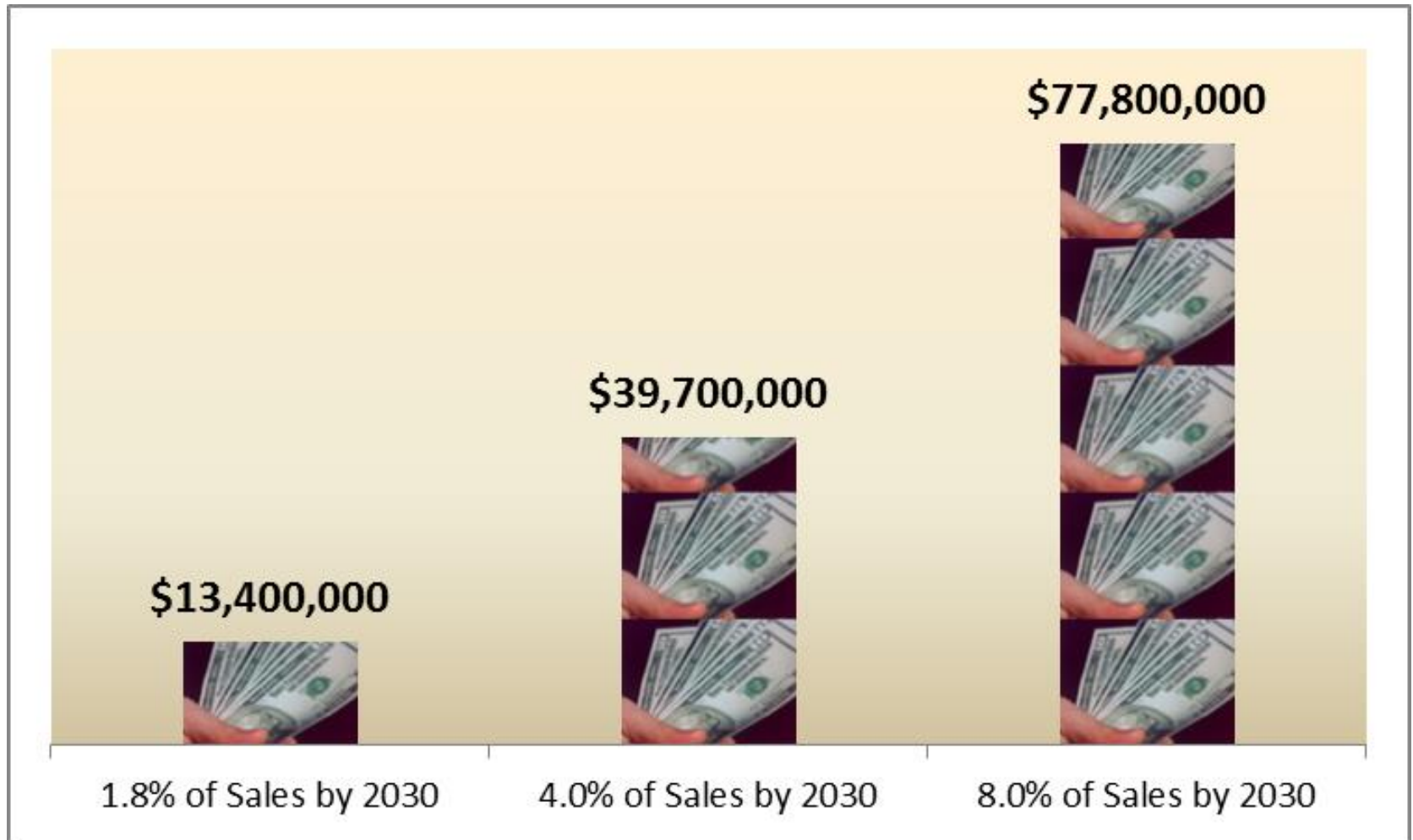
Economic Benefits: Federal Tax Credit

\$14,000,000

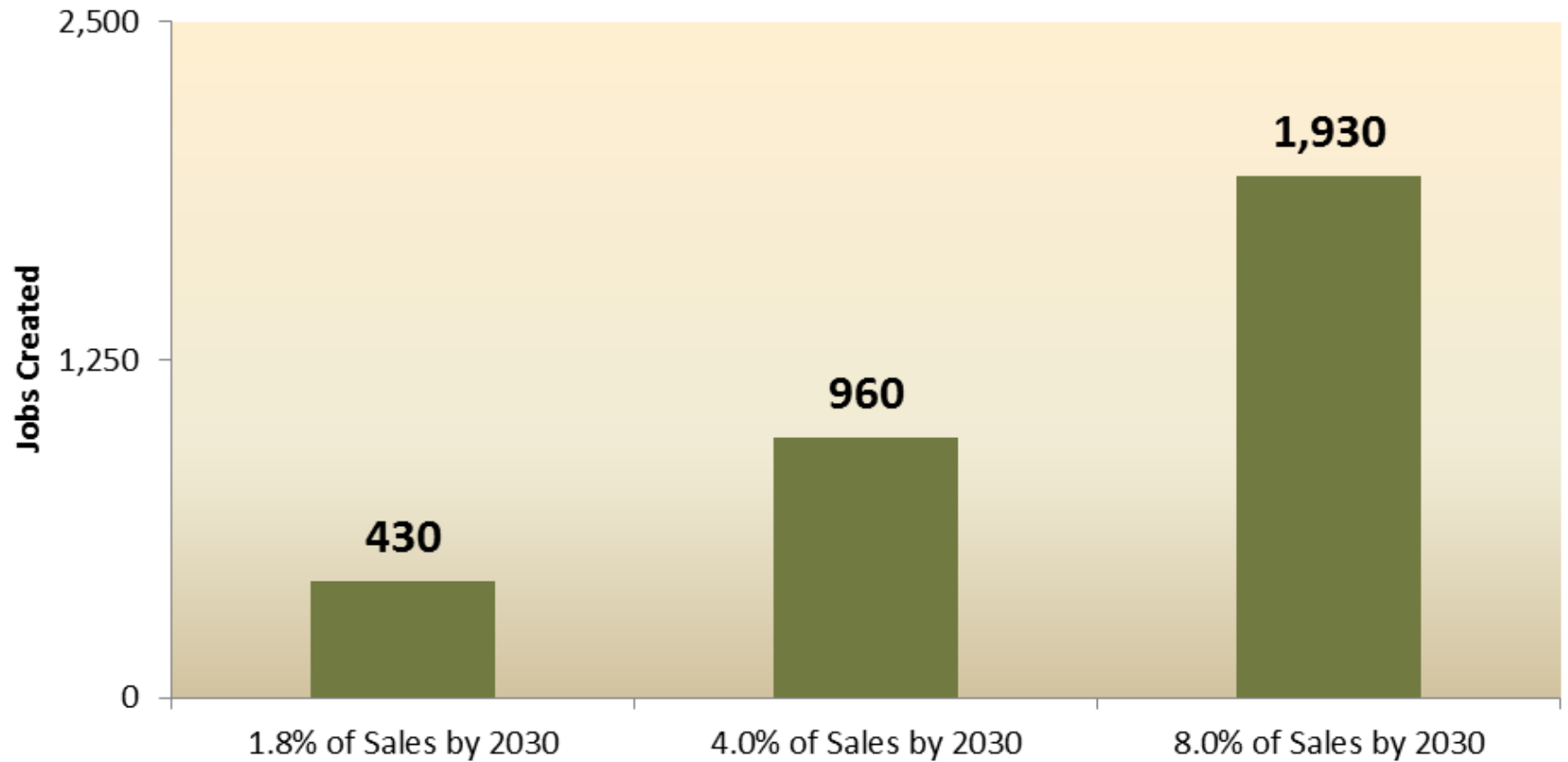
Annual Fuel Savings per EV



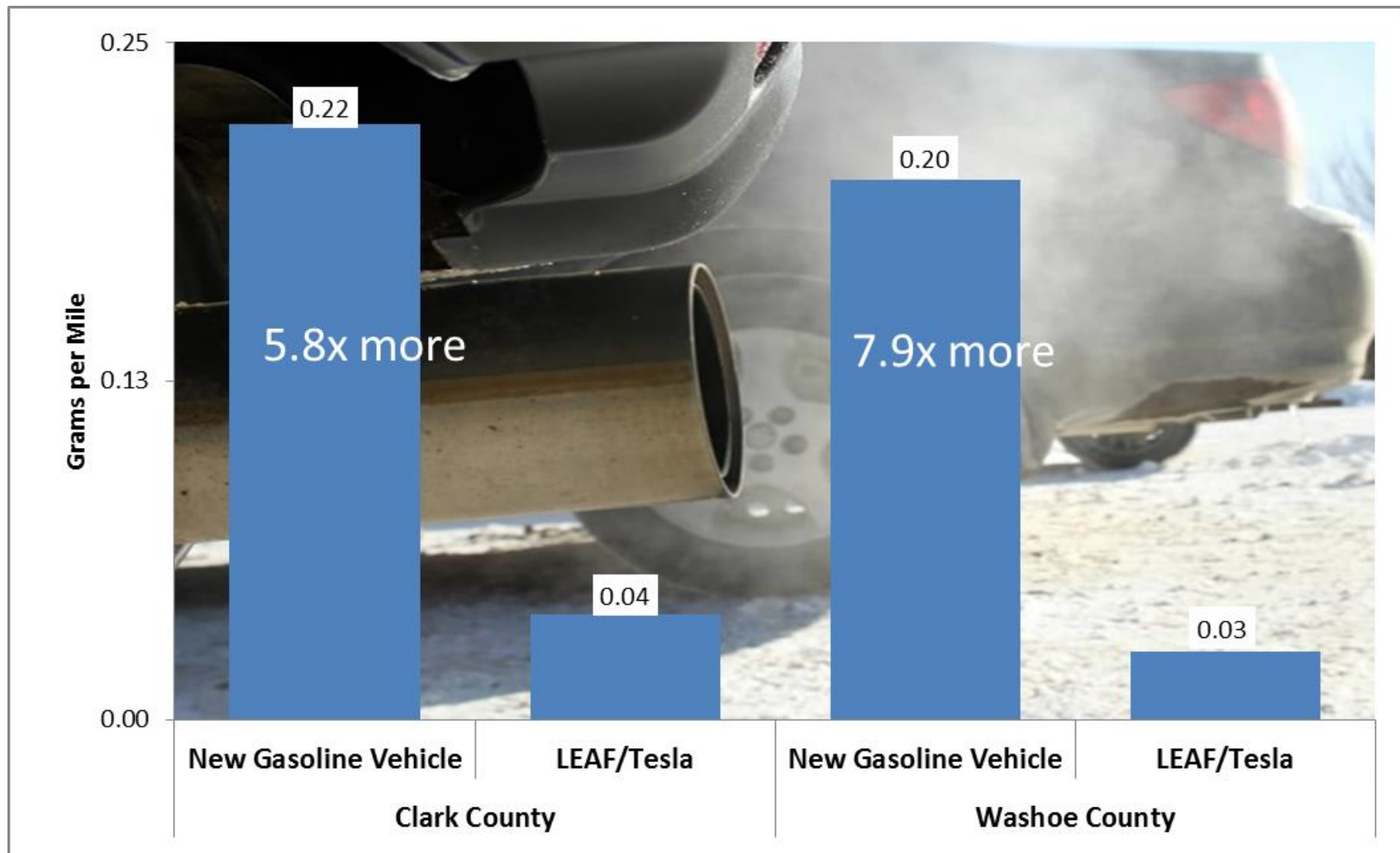
Potential Statewide Annual Fuel Savings by 2030



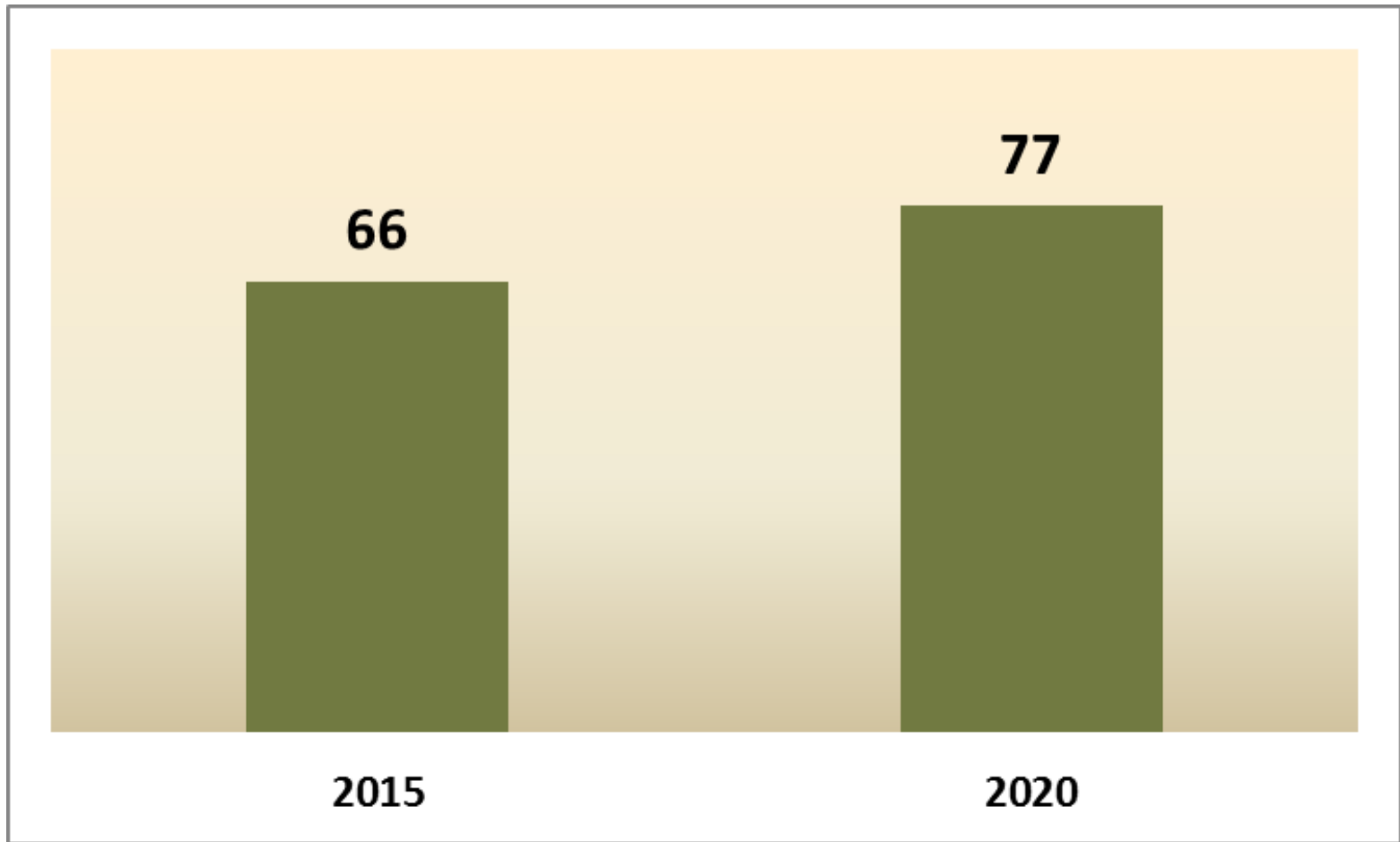
Job Creation



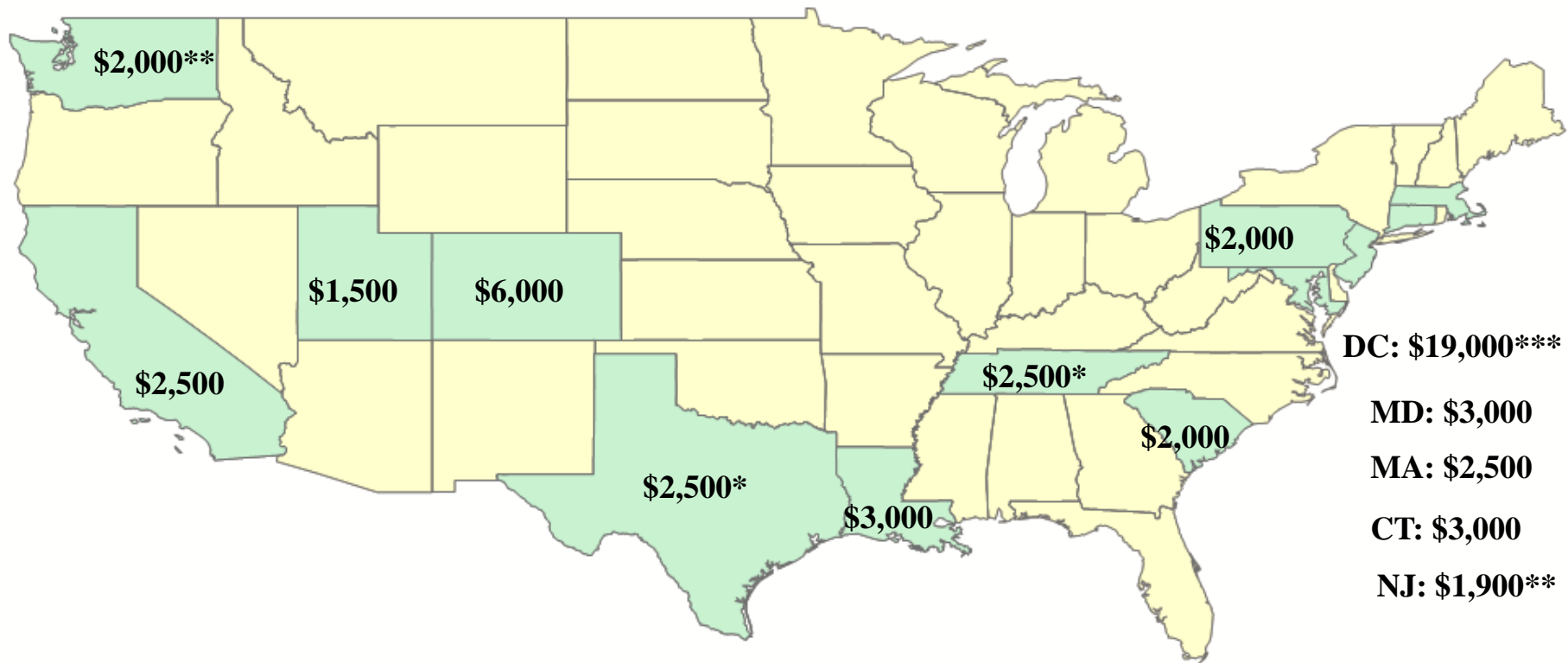
Urban Vehicle Smog Emissions



Miles per Gallon GHG Equivalent for EV



States with Purchase Incentive for Electric Vehicles



*Limited Number of EVs

**Sales Tax Exemption

***50% of Incremental Cost

EV Group Purchase Program

- Boulder and Larimer Counties in Colorado
 - Less than two-tenths of one percent of US population
 - In November and December, they accounted for 5.7% of national Nissan LEAF sales



Policy Recommendation 1:

Develop a State Plan and Programs to Accelerate the Adoption of Electric Vehicles

- ❑ Establish transportation electrification as a state goal and encourage greater utility involvement in expanding the deployment of electric vehicles. Declare that there is a public interest in expanded use of electric vehicles, and direct the PUCN to work with the regulated utilities to develop plans and programs that will accelerate the adoption of electric vehicles in Nevada by the end of 2017. An electric vehicle plan may include investments in or customer rebates for charging infrastructure, in a manner that stimulates competition and customer choice in charging infrastructure; appropriate tariffs for both consumer electric vehicles and heavy duty electric vehicles; consumer or midstream vehicle incentives; and a plan to market the benefits of electric vehicles. The PUCN would review any submitted plan to determine if it is reasonable and will benefit all of its customers and how costs of the implementation of the plan shall be recovered. Similar legislation has passed in 2016 in Utah and Oregon.

Policy Recommendation 2:

Adopt Financial Incentives to Stimulate the Purchase of Electric Vehicles

- ❑ Create consumer financial incentives for electric vehicles. Experience from other states shows that a modest financial incentive, either as a tax credit or point of sale rebate, has a significant impact on increasing electric vehicle sales. Nevada could create a state sales tax rebate, capped at a maximum of \$2,500 per vehicle. Based on 2015 Nevada EV sales, and assuming this would increase sales an additional 50% on average, the cost to the state will be approximately \$2.25 million per year. We recommend a point of sale rebate program that would be in effect for four years, 2017-2020.

Other Policy Recommendations?



Questions?
Thoughts?
Discussion

