MINUTES OF THE JOINT MEETING OF THE SENATE COMMITTEE ON GROWTH AND INFRASTRUCTURE AND THE ASSEMBLY COMMITTEE ON GROWTH AND INFRASTRUCTURE

Eightieth Session
March 12, 2019

The joint meeting of the Senate Committee on Growth and Infrastructure and the Assembly Committee on Growth and Infrastructure was called to order by Chair Yvanna D. Cancela at 1:39 p.m. on Tuesday, March 12, 2019, in Room 4100 of the Legislative Building, Carson City, Nevada. The meeting was videoconferenced to Room 4401 of the Grant Sawyer State Office Building, 555 East Washington Avenue, Las Vegas, Nevada. Exhibit A is the Agenda. Exhibit B is the Attendance Roster. All exhibits are available and on file in the Research Library of the Legislative Counsel Bureau.

SENATE COMMITTEE MEMBERS PRESENT:

Senator Yvanna D. Cancela, Chair
Senator Chris Brooks, Vice Chair
Senator Moises Denis
Senator Pat Spearman
Senator Joseph P. Hardy
Senator James A. Settelmeyer
Senator Scott Hammond

ASSEMBLY COMMITTEE MEMBERS PRESENT:

Assemblywoman Daniele Monroe-Moreno, Chair
Assemblyman Steve Yeager, Vice Chair
Assemblywoman Shea Backus
Assemblywoman Shannon Bilbray-Axelrod
Assemblyman Richard Carrillo
Assemblyman John Ellison
Assemblyman Glen Leavitt
Assemblywoman Rochelle T. Nguyen
Assemblyman Tom Roberts
Assemblyman Michael C. Sprinkle
Assemblyman Howard Watts
Assemblyman Jim Wheeler

STAFF MEMBERS PRESENT:

Marjorie Paslov Thomas, Policy Analyst
Michelle Van Geel, Policy Analyst
Tammy Lubich, Committee Secretary

OTHERS PRESENT:

Rose McKinney-James
Bill Ritter, Jr., Director, Center for the New Energy Economy, Colorado State University
Elise Hunter, Policy and Regulatory Affairs Director, GRID Alternatives
Ray Fakhoury, Principal, Advanced Energy Economy
Robert Johnston, Senior Staff Attorney, Western Resource Advocates
Dylan Sullivan, Senior Scientist, Energy and Transportation Program, Natural Resources Defense Council
Bradley R. Crowell, Director, Nevada Department of Conservation and Natural Resources
David Bobzien, Director, Governor's Office of Energy
Greg Lovato, Administrator, Nevada Department of Conservation and Natural Resources
Judy Stokey, Vice President, Government and Community Strategy, NV Energy
Kyle J. Davis, Nevada Conservation League
Jaina Moan, External Affairs Director, The Nature Conservancy
Patrick Donnelly, Nevada State Director, Center for Biological Diversity
Sara Birmingham, Senior Director, State Affairs, Solar Energies Industries Association
Ian Bigley, Mining Justice Organizer, Progressive Leadership Alliance of Nevada
Tobi Tyler, Executive Committee Member, Sierra Club, Toiyabe Chapter
Jennifer Cantley, Moms Clean Air Force
Mark Hauenstein, P.E. President, Technical Designs; Western Nevada Development District for Pershing County
Reverend Leonard B. Jackson, Director, Faith Organizing Alliance Association; Minister, First African Methodist Episcopal Church
Doug Busselman, Executive Vice President, Nevada Farm Bureau Federation
Paul J. Enos, CEO, Nevada Trucking Association
Andy MacKay, Executive Director, Nevada Franchised Auto Dealers Association
Paul Moradkhan, Las Vegas Metro Chamber of Commerce
John Sande IV, Western States Petroleum Association

Andrew Quinn
Cyrus Hojjaty
K. Neena Laxalt, Nevada Cattleman's Association
Peter D. Krueger, Nevada Petroleum Marketers Association

CHAIR CANCELA:
We will open the meeting with presentations.

ROSE MCKINNEY-JAMES:
Nevada has a long, rich and distinguished history of leadership and we look forward to maintaining that momentum.

Brief presentations will be provided by Elise Hunter, representing GRID Alternatives and Ray Fakhoury with Advanced Energy Economy (AEE). The Honorable Bill Ritter, the 41st Governor of Colorado and the founder and Director of the Center for the New Energy Economy (CNEE), will lead off.

Also provided to the Committee is a detailed bio of Governor Ritter (Exhibit C) and information about the organizations, CNEE (Exhibit D), National Oceanic and Atmospheric Administration, National Centers for Environmental Information (Exhibit E) and GRID Alternatives Program (Exhibit F). Few people have done more to articulate a clear message on the importance of a new energy economy than Governor Bill Ritter.

BILL RITTER, JR. (Director, Center for the New Energy Economy, Colorado State University):
I am a Coloradan by birth and served as the 41st Governor of Colorado. I run an institute at Colorado State University dedicated to working with states, governors, utilities, utility commissioners and legislators. This also includes an academy on national clean energy legislation where some of your members have attended, and some are scheduled to attend in 2019.

I know each state is different and it is a little presumptuous to go into another state to talk about issues pertaining to that state with the hope the policymakers will listen to you. My role here today is to provide an overview of why the matters before you are so important. I will try to limit my comments to the bills that tie carbon policies to energy policies and to transportation policies relevant to your discussions. These issues have become interwoven and are

being addressed around the United States. There has been a wave of action in state legislatures and by governors across America regarding policies that involve setting goals, measuring and reducing carbon, and activities with energy and transportation policies. I will begin with the energy policy because it is on the minds of Nevadans after Question 6 in the 2018 General Election. I am certain it is on your minds as you consider legislation of Nevada's Renewable Portfolio Standards (RPS).

Around the end of my time as governor, 31 states had RPS or goals to put RPS in place. If you looked at the population of people living in a state with RPS, that state would have been the fourth largest country in the world because of the population centers that were impacted by RPS. There is a lot you can do to impact the growing clean energy economy. To scale there is nothing more important than growing the clean energy economy in the United States. The RPS still remains a valuable tool as we continue to think about carbon emission reductions and the transition to clean energy economies.

In the state of Colorado, one of the windiest states in America, Colorado had only 275 megawatts (MW) of wind power. It was said that there was more wind energy in Rhode Island, and Rhode Island is not even a decent sized ranch in the west, yet it had more wind power than Colorado. When we were making the transition to a clean energy economy, wind was approximately 9 cents a kilowatt per hour (kWh) and the cost was a little more expensive than coal and gas.

We set out to do a variety of things over the course of time. In 2007, using 20 percent to 30 percent of RPS, we achieved what a lot of people told us we could not. We created a wind industry and went from 200 MW of wind power to 3,600 MW and are even going beyond that. The price of wind came down from 9 cents a kWh to 1.8 cents a kWh. With the most recent proposal from Xcel Energy, we created a variety of different employment opportunities, both direct and indirect jobs, in building out wind.

Wind is only one part of it. There is an entire solar industry in Colorado which has been replicated across the United States. Domestic energy is produced from renewables and is energy that can develop local economic development activities. It is environmentally friendly because it is carbon free and equitable. You have to be careful not to build a clean energy economy on the backs of

poor people and there is a variety of ways to build sideboards so that will not happen. In the United States, the price of solar power plus storage and the price of wind are cheaper than the cost of coal. This is why there has been a shutdown of coal plants. They are not economical to run and have emission issues.

We have looked at the resource planning for the west, and I am sure the utility operators of the west would agree that 45 percent of coal existing in the west will be gone within a decade. Another 45 percent will likely be gone in the following decade because of the price of renewables, the downward decline and the cheap price of natural gas. These are market pressures on the cost of coal and operating coal-fired generation. This happened because of policies that were put in place in the early part of the millennium. During my time as governor and since, policy has helped create a more affordable and cleaner market.

With the progress of the electric market, it is important we focus on the transportation sector. Two years ago, the emissions from the transportation sector eclipsed the electric sector. This is not true everywhere or in the state of Colorado. The electricity sector has more emissions than the transportation sector, but the electricity sector is going the right way and the transportation sector is not. From a carbon perspective, it is important that policymakers address the transportation emissions sector in America.

A variety of tactics are being taken around the Country pertaining to rulemaking in the agencies responsible for air quality, low-emission vehicles and zero emissions, including ways to try to incentivize electric vehicles. A year or two ago, the eight governors in the west signed a memorandum of understanding to build an electric vehicle infrastructure. Nevada and Colorado were part of that memorandum. The Intermountain West is trying to understand how to build the infrastructure to ensure the transition to electric vehicles without losing incentives at the same time. The policy discussion in the United States is how to transition to a lower or zero emissions vehicle industry without overly punishing or rewarding anybody and ensuring the right incentives are in place. You, as policymakers, have an opportunity to ensure the legislation is right for the energy and economic development and whether it is environmentally sound and equitable for consumers.

In 2010, I was the first governor in America to sign a community solar bill. Since this bill was signed, there has been a variety of iterations of community solar. This shows how the next generation is thinking about community solar and how to address it for the low-income populations. There is a belief that only the elite are able to afford clean energy. We have been able over time to take on that argument and demonstrate it is not true, especially on the electricity side. We now have to do the same with community solar and show the community how solar can be an important part of reducing emissions. The utility-scale solar price has come down and is a way to address low-income people participating in this clean energy economy. Every day we try to reduce the discussion of clean energy from becoming partisan and therefore my leadership academy ensures that both Republicans and Democrats attend.

The naysayers say we did not have the technology to integrate 30 percent renewables because it was too costly. Xcel Energy, the major provider in Colorado, will be at 30 percent by 2020, meeting our goal, and at 55 percent by 2025. The merging of policies and markets, particularly in a market that regulates, is an important focus for policymakers in Nevada and America.

I would like to offer the CNEE as a resource for any of the legislators who would like to move cleaner policy forward at the State level.

ELISE HUNTER (Policy and Regulatory Affairs Director, GRID Alternatives):
GRID Alternatives is the largest non-profit solar developer in the United States. I will talk to you about the work we have done with low-income solar policy, the policy lessons learned and our best practices. I will touch on who we are, the programs we manage and some considerations for Nevada, along with some patterns we have seen throughout different regions in serving low-income populations and frontline communities. I will talk a bit about the barriers to access solar, particularly for low-income users, about workforce training, benefits from low-income solar and what these programs, if designed thoughtfully, can provide to these communities.

GRID Alternatives was founded in 2001, and our mission is to make renewable energy technology and workforce training accessible to underserved communities. We advocate for equitable and inclusive policies and programs. GRID Alternatives is located in Colorado and focuses almost exclusively on community solar due to Colorado's programs. We are also located in California,

the Mid-Atlantic and have a growing international program. We have offices in Nicaragua and Nepal as well as a number of different remote employees in other areas.

Slide 5 of my presentation (Exhibit G) shows GRID's key programs and initiatives that have formed our perspective on policy for our single-family solar programs, which is our bread and butter program, the multifamily and community solar, as well as tribal solar and our international programs.

Single-family solar has been around the longest and has been the cornerstone of GRID Alternatives' work. We provide solar to low income homeowners under programs that have policy-driven incentives. We pair those incentives with other sources of funding, such as tax credits, philanthropy and sometimes donated equipment. With these incentives and other sources, we are able to provide families with solar at either no cost or very little up-front costs. This helps families realize savings from day one. The financial barrier is the biggest problem, particularly for low-income solar. Most families cannot pay for solar up front and oftentimes do not have the credit worthiness to sign a power purchase agreement. This is where thoughtful policies, using incentives and other sources of funding can help.

Multifamily solar is a growing program for GRID Alternatives with primarily rooftop solar serving affordable housing complexes. These policies tend to be designed so both the property owner and tenants can get solar credits. In our experience, the use of virtual net metering based solar credits are used for multifamily solar, but this can be done in a variety of ways.

Community solar is the fastest growing area for GRID Alternatives. This is exciting because so many low-income customers cannot support rooftop solar on their homes. The reasons can be the homes structure or low-income customers who are renters do not fall under the official affordable housing category. Community solar is a way to share the benefits through bill credits within the community without having to invest in solar on the site. Currently, GRID Alternatives has 5 MW of community solar installed, mostly in Colorado, with Xcel Energy and other municipal utilities with another 14 MW under contract.

Tribal solar is another key area that GRID Alternatives works with. Because they are in remote areas, tribes are very interested in renewable energy and microgrids. The tribes are also interested in the ownership of the assets; therefore, we came up with ways to finance systems where the ownership can be transferred to the tribes.

Electric vehicles are an important complementary technology to solar. Low-income customers pay between $75 billion and $78 billion for gasoline. If they switch to solar, electric vehicles would be a way to have a clean source of transportation that leverages the technology they have in their homes.

Coming from a place that sees a lot of wildfires and the effects of climate change, storage and microgrids are a way of providing a greater amount of bill savings. Storage and microgrids can also provide a resilience value in the form of back up to critical loads, especially if driven through time of use rates.

Slide 12 of Exhibit G shows we will have 50,000 kW installed or 50 MW with 11,400 plus systems installed. GRID Alternatives also brings a workforce development and training to every one of our installations and has close to 30,000 people trained, which we consider a key component of solar policies.

Slide 13 of Exhibit G shows the different funding sources GRID Alternatives uses to finance our models. As mentioned before, policy is really the cornerstone of financing. Being able to leverage incentives or budget carve-outs for low-income customers or disadvantaged communities helps us use a number of different funding sources.

A few considerations for Nevada are shown on slide 14 of Exhibit G. These include adopting a funding source for low-income and disadvantaged communities in the form of incentives or even as a separate budget. Diverse solar models, renewable energy models designed for single family, multifamily homes and especially community solar, are important in order to be able serve a wide swath of diverse customers.

Consumer protection should also be considered. We find these communities have been subjected to predatory loans and other types of behaviors by bad actors. There is often a distrust of government programs, so consumer protection measures and provisions are needed to ensure the full economic

value of solar credits are dedicated and given to the customer. We have engaged in a lot of different policy design areas around consumer protection. Some of the co-benefits for solar energy programs are workforce development, energy efficiency and providing that holistic sense of benefits. We find that training on a diverse solar workforce is very effective if it is an added extra to a program or a potential requirement.

Specific considerations for low-income customers are disproportionately impacted by pollution and climate change. They spend four times more of their income on energy than the general market and stand to benefit the most from renewable energy. Some barriers to think about are: financial, the lack of trust, renter status and structural barriers to on-site solar. This can seem daunting, but with thoughtful policy design you can get around these barriers. Slide 21 of Exhibit G shows a snapshot of the areas around the Country where there is different solar activity.

A few policy objectives shown on slide 22 of Exhibit G focus on economic justice and access, reducing peoples energy burden, economic opportunity and workforce development, which ties it all back to climate environmental justice. For more resources, GRID Alternatives and Vote Solar have put together a site called <lowincomesolar.org.> This site has the best practices and policy tools in the Country.

RAY FAKHOURY (Principal, Advanced Energy Economy):
Advanced Energy Economy is a national business organization that works to make the energy used in Nevada, clean, secure and affordable.

We work with Schneider Electric on the demand side to reduce energy bills. Johns Manville is on the supply side of these resources, building the large solar rays and manufacturing recurrent energy. Ingersoll Rand makes up the next level of technologies such as Proterra and BYD Company, building electric vehicles and heavy duty electric fleets. Specifically, in Nevada, we work with these companies to reduce barriers they are experiencing when entering a market or expanding on an existing market.

Since 2009, Nevada has created 25,400 advanced energy jobs. We want to continue to see this number grow and create investment opportunities. Because of the policies legislatures have passed through the years, programs have been

created and the Governor's Office of Energy (GOE) allows projects to reap a tax abatement. The tax abatements have created 8,600 construction jobs with the average worker pay being approximately $41.70 per hour. This is an industry that not only creates jobs and investments, but is putting dollars back into communities.

More than two-thirds of the State's energy usage is actually between commercial and industrial customers. The remaining portion is split between residential and transportation. Transportation is approximately 33 percent of the energy usage. This creates a market opportunity and continues to build on past successes that can be taken to the next level.

The RPS is another area that uses a roadmap or guideline to establish ambitious targets. The RPS accelerates developments by pushing people to reach the next level, sets the tone and sends the right message to businesses looking to invest in the State. Some states throughout the Country have waivered on their commitments causing businesses to question their commitment. Businesses do not like the uncertainty after they have made investments. Setting the right policy rules allows the market to continue developing. Policy can also push the market further.

Electric transportation electrification and electrifying the transportation sector is multiplying. There are opportunities to bring down the cost of personal electric vehicles. We are starting to see the cost for United Parcel Service and Target go down due to investing in heavy fleets reducing their bottom line. These companies can continue operating with the same amount of efficiency and reduce energy costs while reaching a stronger bottom line. The consistent cost for energy and cost on electric vehicles, with lower repairs and lower gas, is helping them to make that next jump to innovating their business ideas.

Nevada as a state has a diverse energy portfolio. There is still an overreliance on natural gas. It is not natural gas from in Nevada, but natural gas being imported from outside the State. This overreliance opens consumers and businesses up to unplanned outages and cost volatilities. Investing in microgrids, solar or solar plus storage is a way to have insurance on the reliability of our production facilities and we can continue delivering to our customers should the grid go down. Unplanned outages impact services and can cost millions. This is another reason businesses are investing in advanced energy technologies. When

investing in these technologies we ensure the ability to expand on resilience and grid reliability and no longer experience unplanned outages. This will benefit all of Nevada consumers. The technologies are at historic lows and companies are investing in these technologies to ensure the price of that resource for the next 25 years. Unsubsidized comparison for wind and solar is beating out coal and natural gas. Having a business and knowing the energy is going to cost the same today as it will in 20 years is an investment consumers are happy to make.

To give a little bit of context on a large scale, since 2009, solar has declined in cost by 88 percent. Wind resources are more technologically advanced and have dropped in cost 69 percent. These numbers are impressive across the Country. The utility NIPSCO in Indiana closed down all of its coal plants earlier than planned because wind is more efficient and cost-effective for their consumers. The new wind construction is better than operating and maintaining those coal assets. The economic message is starting to resonate across the spectrum. It is not a partisan issue, but an economic issue that is able to push different businesses and legislators into supporting this legislation.

Electric vehicles are where solar was about ten years ago. The costs are coming down and the uptake is increasing. In 2017, there was an 81 percent increase in sales of electric vehicles nationwide. In Nevada, we are starting to see the market adjust and increase to the nationwide response. These vehicles are going to states with strong policies such as California. We want Nevada's customers to be aware of their options and solutions in a cost effective way. Nevada needs a comprehensive solution for the next layer of this relatively young market. One percent of all the vehicles on the road in Nevada are electric. It is still small, but it is a growing industry.

In the next ten years, some of the largest automakers across the Country, and in the world, are going to invest in these technologies. Companies such as Volvo are reshaping their fleet and are only going to operate in the electric vehicle space. We want to dispel the notion that electric vehicles are unachievable or unattainable. The cost is coming down and people will be able to start accessing these vehicles. Another opportunity we want to incentivize is third-party buying. We want to be sure used electric vehicles get into the right hands and are not a small subset of drivers.

MS. MCKINNEY-JAMES:
Thank you for allotting the time. I wish to indicate that Governor Ritter's center is a resource specifically designed for legislators and available for your use.

CHAIR CANCELA:
We will open the hearing on Senate Bill (S.B.) 254.

SENATE BILL 254: Revises provisions relating to carbon reduction. (BDR 40-907)

SENATOR CHRIS BROOKS (Senatorial District No. 3):
Climate change in the form of increasing average global temperatures is one of the greatest challenges we face as a State, a Nation, and a planet today. There is an overwhelming scientific consensus that human-caused greenhouse gas emissions are driving this phenomenon. Nevada's public health, economy, wetlands, and overall well-being are facing the consequences. Strained water resources, powerful fires, droughts, and reduced snow packs are a few examples. To mitigate the impacts of climate change, we need to take decisive action now.

In 2015, leaders throughout the world gathered in France to come up with a plan to address this problem, the result was the Paris Agreement. The Paris Agreement emphasized the increase in average global temperatures must be kept to below 3.6 degrees Fahrenheit. Signatories were obligated to reduce their greenhouse gas emissions in a manner consistent with this goal.

The United States, along with virtually every other country, signed the Paris Agreement. The current administration has announced intentions to withdraw the United States from the Paris Agreement and has taken steps to weaken federal environmental protections. Individual states and localities have demonstrated leadership by adopting the Paris framework for themselves, most notably Governor Sisolak earlier today. It is in this spirit that I introduce S.B 254.

Senate Bill 254 declares the State recognizes how serious the problem of climate change is and sets a goal to significantly decrease greenhouse gas emissions over the next several decades. By 2050, we hope to achieve a net reduction as close to zero as possible. This legislation directs State agencies to

find a way to reach this end. This bill is an expansion of a groundbreaking piece of legislation sponsored by then Senator Dina Titus which passed in the 2007 Legislative Session.

The proposed amendment (Exhibit H) was created from conversations with the Governor's Office and some agencies. Section 1 of the bill contains a list of declarations by the Legislature pertaining to climate change and its effect on the State. This includes, but is not limited to, human activities and the burning of fossil fuels, which is the primary driver of global climate change.

Climate change poses a threat to the health and safety of Nevadans and wildlife and negatively impacts the economy. The global increase in average temperatures must be kept below 3.6 degrees Fahrenheit. Nevada must pursue a reduction of greenhouse gas emissions in a manner consistent with the 2015 Paris Agreement.

Under current law, the Department of Conservation and Natural Resources (DCNR) is required to issue a statewide inventory of greenhouse gas emissions every four years. Section 2 of the bill would change this to an annual report and mandate the State provide a 20-year projection of greenhouse gas emissions in Nevada. The DCNR would be required to assess the greenhouse gas emissions for the following sectors: electricity production, transportation, industry, commercial and residential, agricultural and land use and forestry. The DCNR would determine policies and regulations reducing greenhouse gas emissions for the mentioned sectors. The DCNR would be required to find and report ways Nevada could reduce greenhouse gas emissions by the following metrics: 28 percent by 2025, 45 percent by 2030 and zero or near zero by 2050.

In preparing its reports, the DCNR is required to consult with the Public Utilities Commission of Nevada (PUCN), the GOE, the Nevada Department of Transportation (NDOT) and the Nevada Department of Motor Vehicles (DMV). The proposed amendment, Exhibit H, changes section 2, subsection 2, paragraph (b) of the bill. It currently requires the DCNR to identify policies that could achieve reductions in projected greenhouse gas emissions by the sectors set forth in that section. The proposed amendment would revise the bill to provide that the Governor may appoint or designate one or more entities or agencies to identify the policies and provide those policies to the DCNR for its reports.

Section 2, subsection 3 of the bill requires the DCNR to consult with the PUCN, GOE, DMV and NDOT when preparing its report concerning greenhouse gas emissions in the State. This amendment would revise the bill to require the entities or agencies appointed or designated by the Governor, to consult with those agencies when identifying the policies that could achieve the projected greenhouse gas emission reductions. This is a brief description of the bill and the proposed amendment.

ROBERT JOHNSTON (Senior Staff Attorney, Western Resource Advocates):
Senate Bill 254 is existing law as shown in my presentation (Exhibit I) on slide 2. The Nevada Division of Environmental Protection (NDEP) prepares the greenhouse gas inventory reports. The most recent report, Nevada Statewide Greenhouse Gas Emissions Inventory and Projections, was in 2016 (Exhibit J). Due to the valuable information in the report, I recommend it to all members of this Committee.

The U.S. Global Change Research Program (USGCRP) is a federal program mandated by Congress. The USGCRP coordinates research and investments in understanding the forces shaping the global environment and their impacts on society. The USGCRP has a legal mandate to conduct a state-of-the-science synthesis of climate impacts and trends across U.S. regions and sectors every four years. This document is known as the National Climate Assessment. The Fourth National Climate Assessment was released in two volumes in November 2017 and November 2018. The report garnered a lot of press due to the alarming conclusions. On slides 5, 6, 7 and 8 of Exhibit I are some of the highlighted conclusions.

From that state-of-the-science synthesis, our government observed and projected changes in the physical climate system. Globally the annually averaged surface air temperature increased by approximately 1.8 degrees Fahrenheit over the last 115 years. This period is now the warmest in the history of modern civilization. Over the next few decades the annual average temperatures are expected to rise by 2 degrees Fahrenheit in the United States relative to the recent past. The recent past is the average from 1976 to 2005 and is under all plausible future climate scenarios.

The magnitude of climate change beyond the next few decades will depend on the amount of greenhouse gases, especially carbon dioxide, emitted globally.

Without major reductions in emissions, the increase in the annual average global temperature, relative to pre-industrial times, could reach nine degrees Fahrenheit or more by the end of this century. With significant reductions in emission, the increase in annual global temperature could be limited to 3.6 degrees Fahrenheit or less.

The Paris Agreement requires the signatories to put forward their best efforts through "Nationally Determined Contributions" (NDCs). These are the same for all countries signing the Paris Agreement. Each country signing the Paris Agreement put forward its own nationally determined contribution. The NDCs represent targets and actions for the post 2020 period.

The United States submitted its first NDCs on March 9, 2016 as shown on slide 10 of Exhibit I. The United States is committed to achieve an economy-wide target of reducing its greenhouse gases 26 percent to 28 percent below its 2005 level by 2025.

The United States Climate Alliance (USCA) is a bipartisan coalition of governors committed to reducing greenhouse gases consistent with the goals of the Paris Agreement. The USCA was formed on June 1, 2017, the same day President Trump announced he was not intending to comply with its commitments and intended to withdraw from the Paris Agreement. With Governor Sisolak stating Nevada was joining the USCA today, the members now total 23. The alliance members represent 57 percent of the United States population and an $11 trillion economy. The states shown on slide 12 of Exhibit I represent an economy larger than all the countries, with the exclusion of the United States and China. Slide 13 of Exhibit I shows each member states' commitment to the USCA.

Slide 15 of Exhibit I is taken from the NDEP greenhouse gas inventory and shows that Nevada has significantly reduced its greenhouse gas emissions since 2005. Everything to the right of the vertical dotted line is projected. In the 2016 report, the historical information is through 2013.

Carbon dioxide emissions have declined while Nevada's population has increased as shown on slide 16 of Exhibit I. Nationally, carbon dioxide emissions represent approximately 82 percent of greenhouse gas emissions.

Slide 17 of Exhibit I shows the electric power sector has driven the carbon dioxide emission reductions in Nevada. The left of the bar chart shows carbon dioxide emissions from coal and natural gas. This is virtually all emissions for the electric power sector in Nevada. In 2005, there were 26.37 million metric tons (MMT). The gray scale is coal and the yellow is natural gas. The 2016 contributions from the electric power sector has dropped to 9 MMT. The United States Energy Information Administration (EIA) data does not go beyond 2016. That trend has continued in 2017, 2018 and 2019. We anticipate those reductions from the power sector to continue going forward.

Slide 18 of Exhibit I shows the change in carbon dioxide emissions from 2005 to 2016. In 2005, the electric power sector was responsible for 53 percent of emissions; in 2015, that was down to 38 percent. The transportation sector was 33 percent in 2005 and went up to 41 percent in 2016. The two pie charts on page 19 of Exhibit I show the importance of focusing on transportation and reducing emissions from that sector going forward. As we accelerate the deployment of electric vehicles and green up the generation of electricity, electric vehicles have fewer emissions. Going to 50 percent renewable energy by 2030 will make emissions from every electric vehicle on the road that much cleaner than they are today.

ASSEMBLYWOMAN BILBRAY-AXELROD:
You identified DCNR as identifying policies to achieve reductions. Who do you anticipate the Governor will appoint with this amendment?

SENATOR BROOKS:
The DCNR and NDEP are the appropriate agencies to put together the report and the inventory on an annual basis and then bundle that report. We want flexibility and the Governor, for example, could appoint the GOE to draw in all the input with the different stakeholders and then come up with the methodology of getting to the desired reductions.

Many other states have done this through their GOE. Some have created a climate council that have stakeholders. There are a variety of options and this gives the Governor the flexibility to choose.

SENATOR SETTELMEYER:
Are you envisioning this entity would be the one introducing policy? Would that come back to the legislative body to introduce the policy to reduce carbon emissions by 28 percent by 2050?

SENATOR BROOKS:
I am envisioning a host of different methodologies to implement the policies necessary. Some policies would come back to the Legislature asking for enabling legislation. Some could be done through regulation and some could possibly be done through Executive Order. I think it would be a combination of all three. I definitely believe several recommendations would have to come back to the Legislature for their approval, whether for enabling language, actual appropriations or policy.

SENATOR SETTELMEYER:
Agriculture represents 3 percent of the market. Within that 3 percent of greenhouse gas, cattle actually represent 58 percent. How do you get a 28 percent reduction in greenhouse gas, within the agricultural sector, without getting rid of cattle?

SENATOR BROOKS:
The 28 percent reduction is statewide throughout all the sectors. It is not sector by sector meeting the same rigid guidelines

SENATOR SPEARMAN:
Science has conclusively shown there are some things we can do to slow the rate of climate change. Would it be advisable to add someone from academia to the list to level out the process?

SENATOR BROOKS:
The amendment does not limit it to those agencies. Those were agencies identified from an agency standpoint within the State. The amendment lets the Governor designate an agency, organization or any other entity. He could also create one that could include industry stakeholders, agriculture, trucking, manufacturing, electricity per sector, as well as academia, scientists and economists.

ASSEMBLYMAN WHEELER:
Would there be available carbon credits such as agriculture to buy within the State?

SENATOR BROOKS:
Currently, there is no market because there is no mandate. As we have higher percentages of compliance in future years, there could be the opportunity for trading amongst sectors.

ASSEMBLYMAN WHEELER:
So what is envisioned is basically cap and trade for Nevada. Is that what you are saying?

SENATOR BROOKS:
That is one methodology that has been used in other parts of the world and the Country to get to carbon goals. I do not know if that is best for Nevada. It is a possibility the convened group would want to entertain.

ASSEMBLYMAN ROBERTS:
Can another state impact our emissions standard? How does that work?

DYLAN SULLIVAN (Senior Scientist, Energy and Transportation Program, Natural Resources Defense Council):
Under this bill, the agencies are tasked with doing more regular emissions inventory and regular assessment of policies to get to the target. There is nothing specific in this bill that requires "working with state x." Working with other state policies could be developed by the agencies.

SENATOR BROOKS:
We are not looking at the emissions of our neighboring states. It is the emissions created in the State, not the environment from neighboring states.

ASSEMBLYMAN ROBERTS:
Is the answer no, that other states will not skew our emissions standards?

SENATOR BROOKS:
Correct, the answer would be no.

BRADLEY R. CROWELL, Director, Department of Conservation and Natural Resources
I am in support of S.B. 254. See my written testimony (Exhibit K).

DAVID BOBZIEN (Director, Governor's Office of Energy):
The GOE is in support of S.B. 254. See written testimony (Exhibit L).

GREG LOVATO (Administrator, Nevada Department of Conservation and Natural Resources):
We are in support of S.B. 254. See written testimony (Exhibit M).

JUDY STOKEY (Vice President, Government and Community Strategy, NV Energy):
NV Energy and Berkshire Hathaway Energy were two of the first companies to support the Paris Agreement in 2015.

Between 2005 and 2015, Nevada tripled its in-state renewables and reduced carbon emissions by 44 percent. The closure of NV Energy's coal plants reduced our coal-fueled carbon emissions by 85 percent in the State. NV Energy supports this concept and wants to work with the sponsor to move this bill forward.

KYLE J. DAVIS (Nevada Conservation League):
Climate change is real and affects everything the Nevada Conservation League works on, whether that be wildlife habitat, availability of water or the wildfires threatening Nevada. Senate Bill 254 sets the framework to reduce the carbon emissions in Nevada.

We have made incredible investments in clean renewable energy in our State. The State has reduced emissions from the 2005 baseline and needs to continue.

Senate Bill 254, as outlined in the amendment, allows for a plan to include the administration, the Legislature and all interested stakeholders to craft a plan. We can work together to come up with solutions to move the State closer to an emissions free future, a future preserved for our children and our grandchildren. We are in support of S.B. 254 and urge its passage.

JAINA MOAN (External Affairs Director, The Nature Conservancy):
The Nature Conservancy (TNC) is committed to tackling climate change. Climate change is the principle threat to our mission to preserve the lands and waters on which all life depends.

We support S.B. 254 because it provides a foundation to reduce Nevada's greenhouse gas emissions. Senate Bill 254 boosts the resiliency of our ecosystem, communities and economies to deal with the effects of gas emissions. We support the goal of net zero emissions by 2050 and any approved policies. We believe Nevada is well poised to meet this challenge. I refer the Committee to the written testimony TNC submitted (Exhibit N) for examples of these assets and opportunities.

We have a lot of work to do to address climate change and need to act quickly. An annual accounting of greenhouse gas emissions is a tool to assess the effectiveness of our actions and policies. It will help to catalyze what works and help fix what does not.

The TNC recognizes this bill requires the DCNR to allocate additional resources to meet the reporting requirements and support the provision of resources. We offer our expertise to help and urge you to pass S.B. 254.

PATRICK DONNELLY (Nevada State Director, Center for Biological Diversity):
This may be the most important piece of legislation ever brought before this Committee. Climate change is a threat to our water supply, wildlife and the wildfire regime establishing itself in our State. Climate change is causing increased heat waves in the north and south, and affects disproportionate and disadvantaged communities in our State.

Senate Bill 254 is the ambitious policy response to a dire crisis. The Intergovernmental Panel on Climate Change and the National Climate Assessment reports make it very clear we need to zero out emissions by 2050. Many of the renewable energy proposals will get us part of the way. This bill charts a path to taking the steps necessary to ensure a future for our children and our ecosystem.

It is logical to expect resistance to these ideas. We have built an economy on the idea that there are limitless amounts of fossil fuels to burn with no

consequences. This is a fundamental paradigm this bill seeks to change. No one said it was going to be easy to pull ourselves back from the brink of climate destruction.

Our children and our children's children are relying on us, on you, to take that bold step. They are relying on us to create a world where we are no longer dumping our money into fossil fuels destroying our climate. Instead, we need to chart a path toward a livable climate for future generations. This bill will make Nevada a global leader in fighting climate change. We encourage you to support S.B. 254.

SARA BIRMINGHAM (Senior Director, State Affairs, Solar Energies Industries Association):
We support S.B. 254.

IAN BIGLEY (Mining Justice Organizer, Progressive Leadership Alliance of Nevada):
The climate crisis is here and is affecting the health of Nevadans. Climate change disproportionately impacts the health of communities of color, low-income and indigenous communities. The Progressive Leadership Alliance of Nevada supports this legislation and the comments made by others. The increase of reporting and acknowledging an end goal of zero emissions are important steps to address the climate crisis.

TOBI TYLER (Executive Committee Member, Sierra Club, Toiyabe Chapter):
The Toiyabe Chapter of the Sierra Club represents 30,000 members and supports S.B. 254 and the amendment. With our planet's disruptive climate and global challenges threatening every human, it is time to take action.

In facing this challenge, the axiom "think globally, act locally" is accurate. We do not have control over the actions of China, India, Brazil or our own federal government. We can take action to address our greenhouse gas contributions in Nevada.

This bill is an important first step in identifying the sources of emissions locally and formulating a plan to address them. We encourage leaders at every level to implement policies and regulations to make these cuts a reality. Senate Bill 254 will help place Nevada on a path to a healthy future.

JENNIFER CANTLEY (Moms Clean Air Force):
I am here representing a million moms and dads across the Country, the 7,800 members in Nevada and the Kids Clean Air Force.

My son was diagnosed with allergenic asthma when he was three years old. I was diagnosed two years ago and am a native Nevadan who never had allergies or asthma. I am a direct effect of climate change in Nevada.

Nevada taking steps towards mitigating our contributions to climate change and investing in renewables means my son and parents with asthma, will not have to worry about the air we breathe. This means my kids can go outside and play safely without having an asthma attack. I urge you to pass S.B. 254.

MARK HAUENSTEIN, P.E. (President, Technical Designs; Western Nevada Development District for Pershing County):
It is vital to the health of our State to identify and track the reduction of carbon emissions per capita for clean air and a healthy economy. According to data compiled by the EIA in 2015, carbon emissions from the electrical grid creates five times the carbon emissions per person in Nevada as compared to California. Compared to the State of Washington, Nevada has three times the carbon and twice the emissions as Oregon. The EIA data reference is from the 2016 report, Exhibit J, titled Nevada Statewide Greenhouse Gas Emission Inventory and Projections. These numbers do not include the growth of fossil burn already approved on the books. By 2020, it is estimated Nevada will have 600 percent of California's emissions.

Without strong policy to reinforce S.B. 254, environmental justice is bypassed. Nevada will become the Yucca Mountain of carbon emissions in the west. Senate Bill 254 looks to accelerate the measurement of greenhouse gas emissions across all sectors of the economy. If you do not measure it, you cannot manage it. The real work begins when all sectors report their carbon emissions in the same format of total carbon emissions created in Nevada, divided by the State's population.

REVEREND LEONARD B. JACKSON (Director, Faith Organizing Alliance Association; Minister, First African Methodist Episcopal Church):
The Faith Organizing Alliance Association represents a dozen churches in this State. We have stood behind clean energy in the State since the last Session.

The majority of individuals injured or hurt within the communities are people of color. We, as the faith community, will stand behind this legislation 199 percent. Let Nevada set the example.

DOUG BUSSELMAN (Executive Vice President, Nevada Farm Bureau Federation):
The Nevada Farm Bureau is concerned by the actions called for in S.B. 254. Our understanding of the 2016 report, Exhibit J, is that Nevada accounts for 0.65 percent of the U.S. total greenhouse gas emissions and 0.65 percent of the total emissions for the Nation. Nevada's agriculture contributed 3 percent of the 0.65 percent total. Of the 3 percent agriculture total, the digestive process of ruminant livestock is responsible for 58 percent. Another 27 percent comes from using fertilizer to raise crops.

The issued report is not based on a systematic approach of collecting readings of greenhouse gas emissions and tracking down the impact Nevada is causing. The report is a result of a mathematical process. Nevada's related numbers are plugged into the U.S. Environmental Protection Agency (EPA) calculator for various sectors. For agriculture's 3 percent, the calculations are based on the number of livestock reported in the "United States Department of Agriculture AGS Statistic Report" and the fertilizer sales report for the Nevada Department of Agriculture. If those report numbers were made to be zero, then we are supposed to believe that agriculture will not be causing any greenhouse gases.

We appreciate the proposed amendment, Exhibit H, which moved the regulations away from the DCNR. These are extremely important details to understand. Along with the proposal for the amendment, we urge that cost-benefit be used to evaluate policy and regulatory proposals.

PAUL J. ENOS (CEO, Nevada Trucking Association):
The Nevada Trucking Association is in opposition to S.B. 254. We are okay with the reporting requirements and appreciate the data. The data gives us an opportunity to tell a story about our industry. We have an issue of not having a cost-benefit analysis. Without the cost-benefit analysis, we do not have a roadmap to show how we can reduce our emissions.

There was a voluntary market-driven program, SmartWay, started in 2004 with the EPA. This was driven by our customers and shippers telling the trucking industry they wanted us to be more environmentally friendly. How does the

trucking industry do that? They look at different types of technologies, aerodynamics, wind resistant tires and auxiliary power units. These are ways we are reducing fuel. Since the SmartWay program was implemented, the trucking industry has saved almost $30 billion in fuel. The trucking industry would like to see Nevada put something similar in the bill.

It is true the transportation sector will increase over time. I appreciate the proposed amendment, Exhibit H, the Governor's Office and Senator Brooks brought forward. It is more encompassing and broader than NDEP.

We worked on sustainability with NDOT on the State freight plan to help achieve sustainability. What can we implement as a State to help achieve sustainability in terms of freight movement? Getting rid of gridlocks, bottlenecks and congestion will help the movement of freight in the State. There are 42 places in this State that need to be addressed in terms of bottlenecks and congestion. The increase of longer combination vehicles can save 21 percent in fuel as opposed to a straight truck.

We would like to work with the sponsor to try and turn our opposition to support.

ASSEMBLYMAN WATTS:
Are you interested in seeing a cost-benefit analysis added to the policies proposed in the plan?

MR. ENOS:
Yes. We learned with the SmartWay program that you get a 9 percent savings in fuel when aerodynamics are put on a truck. I can quantify that fuel savings as 22 pounds of carbon that goes into the air. This is the kind of cost-benefit analysis we would like to see. This does not just improve the air, but also improves our bottom line as an industry.

ASSEMBLYMAN WATTS:
Would you be open to including the social cost of carbon or a similar metric in terms of quantifying cost-benefits?

MR. ENOS:
Taking the most global approach is something we discussed with NDEP during the Volkswagen Mitigation. We are looking at the communities that were most impacted by these increased emissions. I have no problem taking a look at a global or broader approach as we try to address this issue.

ANDY MACKAY (Executive Director, Nevada Franchised Auto Dealers Association):
I echo what Mr. Enos has stated. Conceptually, we like the bill. However, without a cost-benefit analysis, we cannot support S.B. 254.

I am here not only as the Executive Director of the Franchised Auto Dealers Association, but also as a proud fourth generation native Nevadan and conservationist. I do not say that lightly. From building guzzlers by Denio to fixing a spring at Stone Corral in northern Washoe County trampled by feral horses, I want to see this State be the cleanest.

As stated by Assemblyman Watts, the more information, the better. The proposed amendments significantly improve the bill. However, we would like to see a cost-benefit analysis.

If you look at vehicles today versus vehicles in 2005, the carbon dioxide reductions are 20 percent lower. The data in terms of carbon emissions from the transportation sector by the EIA in 2005 was 16.7 MMT. In 2016, it was 15 MMT. I will acknowledge the numbers are irrefutable, but we are trying to lower the carbon emissions. We do not know what the technology will be 2 to 5 years from now, let alone in 2050. We definitely want to be at the table and involved in the conversation.

SENATOR SPEARMAN:
This is why I asked the sponsor to include academia. There are several scientific articles on carbon dioxide and human health. As someone who is an acute asthmatic, I have done extensive research. There is an article, <https://sciencing.com/list-5921485-effects-carbon-dioxide-air-pollution.html> that states, "Carbon dioxide emissions impact human health by displacing oxygen in the atmosphere. Breathing becomes more difficult as carbon dioxide levels rise." It is very important for us to look globally when talking about cost-benefit analysis, not just from an industry standpoint.

PAUL MORADKHAN (Las Vegas Metro Chamber of Commerce):
Businesses are adopting climate action plans and making commitments to lower carbon emissions. We support several components of the bill and agree with the intent.

We appreciate the proposed amendments that were submitted and are seeking to incorporate economic impacts and factor contributions to the report in terms of criteria. Our intent is to work through our concerns as quickly as possible to be able to remove our opposition.

JOHN SANDE IV (Western States Petroleum Association):
I have been asked to put my client's tempered opposition on record today. Our opposition with the bill is more procedural than structural. We feel as an association that the planning needs to be flexible and comprehensive as well as technologically feasible.

There were two proposals for a reduction in carbon; both are equally effective. Not knowing which one is most cost effective could potentially be more costly to our State and its constituents. It is important to factor in cost effectiveness into the planning, as done in integrated resource planning with utilities.

Flexibility needs to be included in the discussions. Carbon reduction can have an effect on other issues. An example would be Tesla. The State has invested significantly in the short term to achieve long term use of batteries and technologies developed by Tesla. In the short term, the approximately 7,000 employees driving to the factory daily, will have a significant carbon footprint on the State. As a State, we have to look at this and the benefits the project will ultimately convey, not only in the State but nationally and internationally.

I have offered to work with the bill sponsor on language I received from my client to structure some wording with what is currently in the bill.

ANDREW QUINN:
I want to take a step back and define what we are talking about. Climatology is not a science. It is based on mathematical, statistical models that are predictive in nature. Mathematics and statistics are not a science. Evidence that mathematics is not a science is through the abbreviation of STEM, which stands

for Science, Technology, Engineering and Math. If math was a science, it would not need to be listed separately in that abbreviation. Further evidence that mathematics is not a science or statistic is the education requirement to become a patent attorney or patent agent before the United States Patent and Trademark Office.

The education requirements to sit for that exam are: engineering, physics, chemistry, biology and pharmacology. Statistics, mathematics or environmental science are not listed. They do not meet the science requirement because they are not sciences and are predictive in nature. This is a failed prediction model.

Al Gore in 2006 in his movie *An Inconvenient Truth*, predicted that in 10 years many coastal cities would be under water. Here we are 13 years later, and none of those things have come true.

Recently, Representative Alexandria Ocasio-Cortez predicted we have 12 years to save the planet. She is not a scientist and neither is Vice President Gore. She has a bachelor's degree in economics, and I am sure the courses she had to take were statistics and econometrics. We have seen how the economists fail to make predictions on the housing bubble, the stock market crashes and the dot-com bubble. We have seen the same thing with the climate models which failed every time and have not come true.

CHAIR CANCELA:
We will now hear neutral testimony.

CYRUS HOJJATY:
I am not sure if climate change is real or not. We do know for a fact that the climate has changed in the world throughout history. This winter all across the U.S. we had record cold, and three weeks ago we had snow. I do believe man is causing warming, at least in the urban level. This explains why there is a 20-degree gap between day and night at the McCarran Airport versus outer areas like Pahrump and Indian Springs, which is 30 degrees. Decades ago at night, the McCarran Airport used to cool down faster. The question is not whether climate change exists or not. The question is what are you going to do about it?

I do not want higher taxes and regulations for the average person. I do not want failed renewable energy programs like Solyndra or instigated redistribution scams. I suggest you look at my home state of California where many businesses are fleeing due to the environmentally strict policies. I have heard reports they are planning to ban diesel trucks. It certainly does not help our environment and emissions when there is flooding of immigrants into the Country every year.

Make no mistake, I do not want to give my money to the Koch brothers or the oil fossil fuel companies. I drive a Toyota Prius. I certainly do not want schemes to benefit billionaires like Tom Steyer and many Wall Street executives like George Soros.

We have to reduce emissions and encourage more organic farming. I am planning a lower emissions neighborhood outside of the Las Vegas valley where people can still own single family homes, but reduce their car trips. There are alternative means to get this done.

K. NEENA LAXALT (Nevada Cattleman's Association):
The Nevada Cattlemen's Association is neutral on S.B. 254. We respect the intent of the bill and request to be part of the process of data collection. Data collection in quantifying emissions, when it comes to livestock can be inaccurate if the impacting factors are not taken into consideration. We strongly believe in looking at this from a holistic point of view and taking into consideration the many factors which determine emissions.

ASSEMBLYMAN ELLISON:
With respect to the problem wildfires, is it not a proven fact that the lack of grazing and the first responders or the Bureau of Land Management (BLM) not getting to these fires quickly has increased the fires to massive numbers? Can you answer that?

MS. LAXALT:
Yes, they have been looking at the impact of grazing and when grazing actually takes place.

Early spring when cattle graze on the green grass is one factor contributing to the emissions. Cattlemen play a part in what the cattle eat and where they graze. This is part of the ecosystem coming together in a holistic point of view.

ASSEMBLYMAN ELLISON:
The lack of grazing is causing the higher grass and creating fuel. Then the first responders or larger teams are not getting to the wildfires fast enough. It seems they allow these fires to get out of control. This is seen in rural Nevada over and over with reports of smoke and gases that are being created by these fires. Is that not correct?

MS. LAXALT
I am not an authority on wildfires. There should be another agency present who can to talk about wildfires. The wildfires are a huge contributor to our air quality in Nevada. I cannot talk about how quickly the BLM addresses those issues or how the wildfires are being fought. We do what we can with the cattle and try to utilize the grazing areas to the fullest extent. This results in less cheatgrass and less risk of wildfires.

PETER D. KRUEGER (Nevada Petroleum Marketers Association):
The Nevada Petroleum Marketers Association is a statewide trade group of fuel suppliers, distributors, and retailers in Nevada. They operate more than 1,230 fuel retail sites employing more than 18,000 men and women. They sell in excess of 2.6 billion gallons of fuel annually in the State.

Our members understand that climate change is real and are neutral on S.B. 254. Senate Bill 254 will require NDEP to produce the annual report "Nevada Statewide Greenhouse Gas Emissions Inventory and Projections." This report indicates the total greenhouse gas emissions for Nevada in 2005 was 60.362 MMT. This number serves as the baseline for all future reductions required by this bill. This bill further requires a 28 percent reduction by 2025, a value of 16.901 MMT, with additional reductions required in future years. Since the 2016 NDEP report was published, the transportation sector has become the largest contributor to greenhouse gases in Nevada. This is significant since we represent a large portion of the transportation sector. Wholesale, retail and distribution of liquid fuels is as efficient as technology permits. Ninety percent of our fuels coming from California meet the highest standards in the world. The vapor recovery plan also plays an important role in reducing greenhouse gases.

With the current state of technology, additional greenhouse gas emissions savings can be achieved by our members.

Environmental groups such as Environment Nevada and Southwest Energy Efficiency Project believe expanding the use of electric vehicles is the best way of achieving reductions in the transportation sector. I am told that the cost of high rate charging units are $150,000 or more. The cost is out of reach for most fuel dealers and makes expansion of Nevada's electric highway the sole domain for Nevada's electric utilities. If it is the goal of this Legislature to reduce greenhouse gases and meet the target set in S.B. 254, current fuel suppliers must be given an opportunity to participate. We will ask the 2021 Legislature to adopt "energy divorcement" legislation and regulation similar to the gasoline divorcement enacted by this Legislature in 1987. The highly successful gasoline divorcement law encouraged small and medium Nevada fuel dealers to open and expand throughout the State fostering competition and price moderation. The same results can be achieved with energy divorcement and preventing a single producer of electricity from controlling production, distribution and the retail sale of electricity for electric vehicles. We will also ask the 2021 Legislature to create grants and low interest loans for electric vehicle fueling sites in Nevada. This will assist smaller fuel stations to meet the demand and help the transportation sector achieve the greenhouse gas reduction mandates in S.B. 254.

SENATOR BROOKS:
I appreciate the time you have taken to hear this important piece of legislation. The cost-benefit analysis is important. We should also look at the cost of inaction and the overall cost of climate change on our economy, society and the planet.

CHAIR CANCELA:
We will close the hearing on S.B. 254 and move to public comment.

MR. HOJJATY:
How we plan and design our communities plays an important part in the environmental emissions we experience. I am not forcing everyone to live in packed centers and not own cars. We need alternatives on how to build and design our communities on the outer fringe. We need to plan developments to help people reduce the need for cars. An example would be a single family

home villa. If we develop more buildings with an office and condo together we can reduce car trips drastically. I also support mass transit that is cheaper and faster than automobiles. Renewables have to be cheaper than fossil fuels and cost effective. This should not alter the decisions of people wanting single family homes.

Environmental programs must incentivize people. The reasons people spread out are the codes and regulations that build neighborhoods like Summerlin and Green Valley. It is also due to socioeconomic differences. Every zip code has different demographics. Emissions are going to fall regardless of whether these bills get passed because technologies and innovative people are buying electric cars.

In response to the previous testifier, I am an Iranian American. Iranian Americans do not tend to live in areas with high ranks of pollution, we are people of color too.

I do not support an environmental plan that is connected with the United Nations programs, Agenda 21 or the Club of Rome. The real people who are creating emissions are the people in China. The real problem is our monetary system that cares more about profits. Capitalism, socialism, communism and fascism are all flawed economic systems and are never going to solve our environmental problems.

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CHAIR CANCELA:
Additional support documents, comments and presentations for The Nature Conservancy Exhibit N, Advanced Energy Economy overview (Exhibit O), Nevada's Advanced Energy Show Case presentation (Exhibit P), Algirdas Leskys' comments (Exhibit Q) and Senator Brooks' supporting document for S.B. 254 (Exhibit R) are available on NELIS. This meeting is adjourned at 3:48 p.m.

RESPECTFULLY SUBMITTED:

Tammy Lubich,
Committee Secretary

APPROVED BY:

Senator Yvanna D. Cancela, Chair

DATE:

Assemblywoman Daniele Monroe-Moreno, Chair

DATE:

EXHIBIT SUMMARY				
Bill	**Exhibit / # of pages**		**Witness / Entity**	**Description**
	A	1		Agenda
	B	9		Attendance Roster
	C	1	Bill Ritter, Jr. / Center for the New Energy Economy, Colorado State University	Biography Bill Ritter
	D	2	Center for the New Energy Economy	Agency Overview
	E	5	National Oceanic and Atmospheric Administration	Supporting Document
	F	2	Elise Hunter / GRID Alternatives	Agency Overview
	G	24	Elise Hunter / GRID Alternatives	Agency Presentation
S.B. 254	H	1	Senator Chris Brooks	Proposed Amendment
S.B. 254	I	23	Robert Johnston / Western Resource Advocates	Presentation
S.B. 254	J	57	Robert Johnston / Western Resource Advocates	Presentation Nevada Division of Environmental Protection
S.B. 254	K	4	Bradley Crowell / Nevada Department of Conservation and Natural Resources	Written Testimony
S.B. 254	L	2	David Bobzien / Governor's Office of Energy	Written Testimony
S.B. 254	M	3	Greg Lovato / Nevada Department of Conservation and Natural Resources	Written Testimony
S.B. 254	N	3	Jaina Moan / The Nature Conservancy	Written Testimony

S.B. 254	O	2	Ray Fakhoury / Advanced Energy Economy	Agency Overview
S.B. 254	P	12	Ray Fakhoury / Advanced Energy Economy	Agency Presentation
S.B. 254	Q	2	Algirdas Leskys	Written Testimony
S.B. 254	R	2	Senator Chris Brooks	Supporting Document