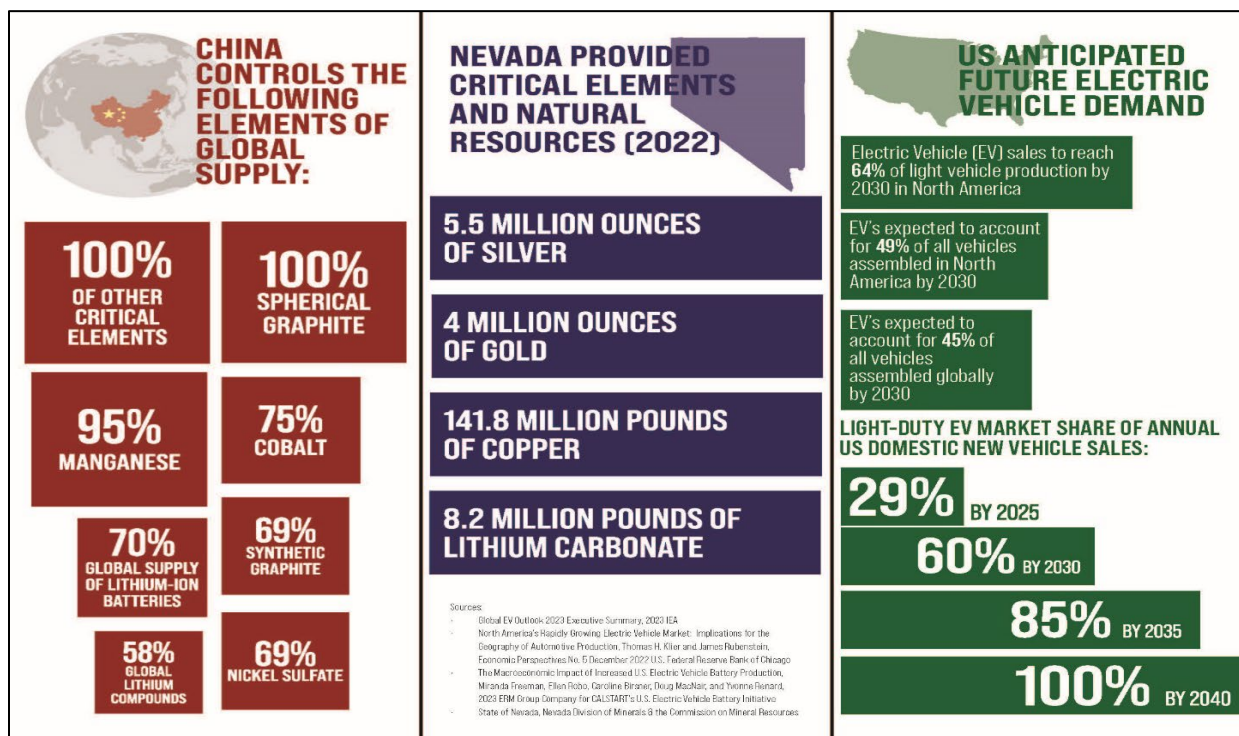


## Executive Summary

The Nevada Lithium and Other EV Materials Loop Regional Technology and Innovation Hub (Nevada Tech Hub) will harness the region's abundant natural resources to grow and onshore firms in every sector of the lithium economy, from extraction and processing to manufacturing and the recycling of lithium batteries. By establishing Nevada as the nation's key lithium-batteries, critical elements, and other electric vehicle (EV) materials industry cluster, with a 'cradle to cradle' materials loop, the Nevada Tech Hub will become an ideal location for the nation's future electrification storage industry, positioning the region as a global leader in the sector, bolstering U.S. national and economic security, and ensuring a sustainable future for the nation's electrification and energy storage needs.

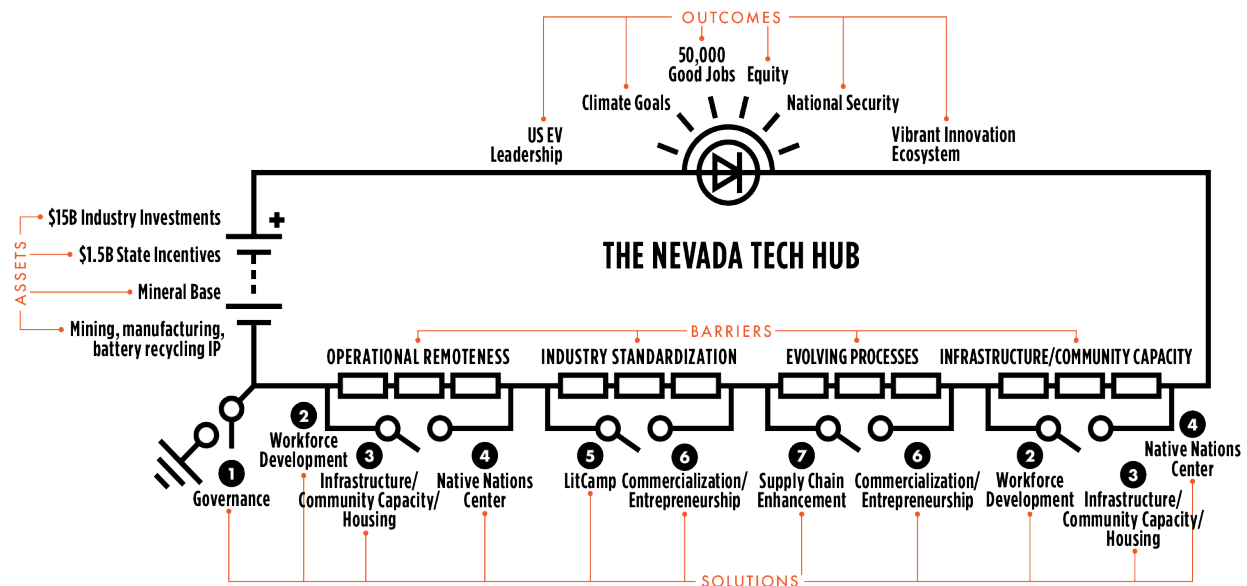
Lithium and other critical elements are an essential component in battery manufacturing, and lithium batteries are crucial for powering EVs and other electronic devices, a sector that has seen exponential growth in the past 15 years. Support from the EDA will position the region competitively in the global market, areas currently dominated by foreign powers like China. EDA support will also accelerate innovation in both advanced manufacturing and recycling, helping Nevada to diversify its economy by acting as a catalyst to attract additional investments from both private and public sources. This will both strengthen the manufacturing supply chain and fuel critical investments in workforce development, commercialization and innovation, infrastructure improvements, housing capacity, equity, and other critical parts of the value network to ensure communities across the region benefit from inclusive and sustainable growth.



## Vision, Mission and Goals

The Nevada Tech Hub’s vision is to ***establish Nevada as the nation’s center for innovation across the lithium batteries and other electric vehicle (EV) materials supply chain, foster heightened efficiency, cooperation and competition across the entire industry sector, and mitigate economic distress of previously overlooked geographies and communities.*** This vision will be achieved by driving U.S. innovation and global competitiveness in this growing industry sector, foster inclusive capitalism and equitable economic growth, address the climate crisis through mitigation, adaptation, and resilience efforts, expand opportunity and discovery through data, and provide 21<sup>st</sup> century service with 21<sup>st</sup> century capabilities.

The Nevada Tech Hub represents a generational opportunity for communities located throughout the Nevada Tech Hub region and the nation to capitalize on the growing demand for EVs and green energy storage solutions. The economic potential in this sector is immense. Global automotive lithium-ion battery demand grew 65% in a single year, hitting 550 GWh in 2022. In the United States, EV sales have increased every year since 2008 and grew from 238,540 units in 2020 to 459,474 units in 2021. Total economic output in this sector in the U.S. alone is projected to reach \$90 billion to \$130 billion in 2030 and \$150 billion to \$200 billion in 2040 under moderate and high EV adoption scenarios, respectively. The Nevada Tech Hub will foster sustainable growth and innovation in this critical sector by supporting broad business creation, attraction, retention, and expansion efforts across the sector and among related subsectors, positioning it as a linchpin in America’s green energy transition and as a model for innovation-based economic development in large geographic areas with both urban and rural communities.



The region, which includes 16 of Nevada’s 17 counties and two metropolitan statistical areas, is rich in critical minerals, and is uniquely positioned to anchor the U.S. in the global lithium battery and EV materials market. Nevada’s mining sector is a major contributor to the state’s overall economic base (\$7.9 billion in 2021) and over 250 individual metals and minerals are actively mined

in the state, including critical minerals like copper (141.8 million pounds in 2022), rare earth elements, and other raw materials needed for both the national lithium economy and for the nation's green energy transition. The Silver Peak Lithium Mine in Esmeralda County met roughly 1.5% of global demand for lithium in 2020 and remains the only fully operational large-scale lithium mine in the U.S. Several other, far larger lithium mines are in active development across the state, including Thacker Pass in Humboldt County which is believed to be the single largest lithium deposit in North America. Nevada also leads in the production of other critical elements and industrial and precious metals needed to support a variety of lithium battery and other EV material advanced manufacturing, including 77.0% of all U.S. gold, which has critical applications in electronics.

Nevada boasts a number of existing firms which have helped transform Nevada from “the Silver State” into “the Lithium State” over the past 15 years. Following the establishment of the Nevada Governor's Office of Economic Development (GOED) and the development of the state's first true statewide economic development plan, the efforts of firms like Comstock Inc, Ioneer, Lilac Solutions, and Lithium Americas opened the door to Nevada becoming a global leader in innovative lithium and rare earth metal extraction and processing activities. But Nevada's vision goes well beyond mining and refining and state tax incentives have helped convince private sector firms like American Battery Technology Company, Dragonfly Energy, Panasonic Energy of North America, and Tesla to grow their footprint in the state, working to build a robust advanced manufacturing sector focused on lithium battery and other EV material production. Completing the loop for Nevada's lithium economy are firms like Redwood Materials and Aqua Metals, Inc. that are establishing innovative new processes for recycling lithium batteries, providing the U.S. with alternative sources of not just lithium, but also critical minerals like nickel, cobalt, and manganese.

Fueled by public, private, and nonprofit resources, the Nevada Tech Hub aims to expand these robust advanced mining and manufacturing capabilities across the state. Headquartered in the Reno-Sparks MSA, the Nevada Tech Hub includes both urban and rural counties across Nevada that are pivotal to the lithium industry cluster. Called the 'Silicon Bridge' due to its strategic proximity to the Bay Area, the Nevada Tech Hub is building on this historic mining legacy to transform the state in ways that will support other sectors of the EV value network and supply chain. This transformation will diversify and grow Nevada's economy while building U.S. economic and national security by onshoring industries critical to U.S. economic stability and national security.

### **Problems Slowing Advancement**

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The Nevada GOED's 2023 Comprehensive Economic Development Strategy (CEDS) provides a roadmap to better leverage Nevada's assets while ensuring inclusive growth. The CEDS includes a comprehensive analysis of the state's strengths, weaknesses, opportunities, and threats (SWOT), a

major theme of which was the need for better coordination and collaboration among stakeholders to drive economic growth and innovation <sup>1</sup>.

The Nevada Tech Hub is already helping to create crucial coordination and alignment across the region. The Nevada Lithium Battery & EV Materials ‘Meet and Greet’ Symposium, hosted by the University Center for Economic Development (Nevada UCED), Nevada’s only EDA funded University Center program and part of the University of Nevada, Reno (UNR), the Nevada Battery Coalition, and the Nevada GOED, was held in October 2023. The event was attended by over 150 public sector, private sector, and non-profit community-based representatives, including eventual members of the Nevada Tech Hub Consortium and representatives from the UNR’s NSF Engines Type 1 Development Award team. The cross-sector discussions highlighted significant interdependencies and led to the development of the seven component projects outlined as part of this Regional Technology and Innovation Hub Phase 2 proposal. These projects are designed to address the four key limitations and barriers that attendees felt are currently preventing the Nevada Tech Hub region from becoming a global leader in all stages of the lithium lifecycle economy.

- **Operational Remoteness:** Much of the Nevada Tech Hub region is extremely rural, which poses both logistical and operational challenges to lithium and other critical mineral extraction and processing. For example, Albemarle, home to the Silver Peak Mine, is in rural Esmeralda County which is over 200 miles from both the Reno-Sparks MSA and the Las Vegas MSA. Thacker Pass, the site of Lithium America’s new proposed lithium extraction site, is almost 100 miles from the nearest population center, the city of Winnemucca in Humboldt County. This remoteness creates major difficulties in onshoring and business development that could close gaps in the supply chain and value network of Nevada’s lithium economy. The Nevada UCED calculated this ‘leakage’ of economic activity out of the state to total \$529.1 million in 2022 for the Mining, Quarrying, and Oil and Gas Extraction industry sector.<sup>2</sup> The Nevada Tech Hub will work to address the challenge of operational remoteness by ensuring that pressing infrastructure needs are addressed and funding workforce training programs that both meet the hard and soft skills requirements for remote operations and specifically target rural and Native Nations populations closest to new operations.
- **Industry Standardization:** The current rapid growth and future projected growth in the demand for lithium batteries and critical elements has created a national scramble for secured new sources of natural resources and new approaches to mining and processing critical minerals, to manufacturing, and to recycling EV batteries. But the lack of plug-and-play tools and industry standardization presents challenges when hundreds of millions of dollars are needed to establish new operations or facilities. For example, unlike more established sectors of Nevada’s mining industry, where standard practices have led to significant economies of scale, lithium extraction and processing is complicated by the unique chemical composition of each clay deposit. This variability requires distinct approaches for effective extraction, leading to uncertainty among firms as they develop and refine processes without clear indicators of which will prove most efficient and lucrative. In

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<sup>1</sup> Nevada Governor’s Office of Economic Development. December 2023. *2023 Nevada State Plan: Realizing Nevada’s Electric, Innovative, and Connected Future*. <https://goed.nv.gov/newsroom/?type=state-plans>

<sup>2</sup> UCED. 2022. A Comprehensive Examination of Nevada’s Mining, Quarrying, and Oil and Gas Extraction Industry Sector’s Value Network and Supply Chain. Technical Report 2021/22-27.

a similar vein, less tolerance for environmental impacts in the U.S. compared to other countries such as China has pushed the development of direct lithium extraction methods, including the ion exchange technologies used by Lilac Solutions that reduce the considerable water demand and the physical footprint of lithium processing facilities. However, these approaches must be tailored to the exact chemistry of lithium brines, leading to uncertainties that create investment risks. However, this challenge also creates an opportunity for innovation. By strengthening the existing startup ecosystem within the Nevada Tech Hub region and helping new promising technologies cross the proverbial 'Valley of Death' and achieve commercialization, the Nevada Tech Hub will help create standardized and off the shelf solutions that can de-risk investments in this space.

- **Evolving Processes:** Downstream sectors of the lithium economy are also facing rapidly evolving technologies and processes. Battery technologies are advancing quickly and no consensus exists for which types will dominate the market for which applications. It is not clear if and when solid-state batteries will become commercially viable or if there will be a market for cheaper but heavier sodium ion batteries. These uncertainties make it difficult to plan how to fill gaps in supply chains and value networks or in developing the right training programs for workforce development. Similarly, recycling processes must adapt to diverse battery chemistries, further complicated by inconsistent policies on battery disposal and recycling. The Nevada Tech Hub will work to mitigate the challenges of evolving industrial processes by drawing from the expertise of its diverse Consortium, from university researchers to industry representatives to economic development entities, to guide its commercialization and entrepreneurship and supply chain enhancement initiatives toward smart investments and market-shaping solutions.
- **Infrastructure/Community Capacity:** Critical infrastructure and community support systems are not yet fully developed to support the scale of growth envisioned for Nevada's lithium economy. Critical challenges in infrastructure, community capacity, housing availability, and equity pose significant barriers to the expansion of its nascent lithium battery and EV materials industry. Nevada's severe affordable housing crisis further strains the sector's ability to attract and retain skilled workers, particularly in rural regions. In response, the Infrastructure, Community Capacity, and Housing project will focus on new ways to pool resources, eliminate siloed approaches, establish regional partnerships, secure funding, and coordinate infrastructure priorities that directly contribute to the Nevada Tech Hub's goals.

Addressing these four key limitations and barriers is crucial for Nevada to fully leverage its potential in the global lithium market and ensure sustainable growth and development for its communities.

### **Initiatives, Component Projects and Partners Needed to Achieve the Vision**

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The Nevada Tech Hub proposal consists of seven interrelated project areas (initiatives) described below. Combined, these initiatives will organize the industry-support ecosystem and close identified 'gaps' in the value network and supply chain of this emerging industry sector by supporting broad business creation, attraction, retention, and expansion efforts across the emerging lithium economy throughout the region. The UNR, and specifically the Nevada UCED, will serve as the lead entity for each of the seven component projects and will work in partnership with the Nevada Tech Hub's 60+ Consortium members and partners to implement specific actionable items over the next five years. The Nevada UCED is uniquely positioned to serve as the lead entity of the

Nevada Tech Hub with over 30 years of experience in supporting local and regional community and economic development efforts and is supported by the UNR, an R1 Carnegie Research University currently celebrating its 150<sup>th</sup> anniversary as the state's preeminent land-grant public research institution.

1. **Supply Chain Enhancement:** This project seeks to enhance the existing value network and supply chain of Nevada's lithium economy. The project team, consisting of Nevada UCED personnel and representatives from seven individual regional economic development authorities and two EDA Economic Development Districts, will address supply chain gaps identified by industry consortium members, conduct ongoing and regular assessments of each sector of the lithium economy, assist firms in accessing incentive programs, foster collaboration, and generate leads to onshore missing elements of Nevada's lithium economy supply chain. The project will be executed over five years with specific milestones created for each year.
2. **Workforce Development:** This initiative component is focused on creating a holistic approach to meet industry workforce needs (current and future) while ensuring all ages and levels of individuals are informed of the opportunity provided through this project. The UNR and the Nevada UCED will work with the Nevada Office of Workforce Innovation (OWINN) and with other workforce development partners, including three community colleges, Great Basin Community College, Truckee Meadows Community College, Western Nevada College, several unions, trade associations, and apprenticeship programs, and Nevadaworks among others, throughout the Nevada Tech Hub region to develop and execute a cohesive approach to addressing the workforce development needs of Nevada's emerging lithium battery, critical elements, and other EV materials industry sector and related subsectors. Focus will be on: 1) listening to and working with industry employers to ensure their staffing and workforce needs are met, 2) ensuring personnel across workforce entities have the staff and the opportunity for professional development and training necessary to ensure people have the correct skills, and 3) addressing education deficit, by creating new career pathways.
3. **Lithium Campus:** The Lithium Campus (LitCamp) project will be led by the UNR, including parts of the UNR's College of Engineering, College of Science, and from the Office of Research and Innovation, to develop an innovation-centric, technology-maturation user facility that supports the development of materials and technologies related to lithium batteries and other EV materials in order to support broader standardization across the industry sector. LitCamp will provide access to advanced characterization and testing tools, process optimization, and pre-pilot scale testing facilities to regional industry members to help move technology development from TRL levels six through nine. LitCamp will be a fee-for-service, high-tech user facility that provides cutting-edge equipment, processes, facilities, and services. This project directly supports the Nevada Tech Hub's capacity for attracting, nurturing, maturing and sustaining technology-based companies in the chosen technology area and materially supports the success of the Commercialization and Entrepreneurship component project.
4. **Commercialization and Entrepreneurship:** The centerpiece of this project is an effort to better connect researchers, IP, industry, and capital through an Open Innovation Marketplace intermediary. This Marketplace intermediary will assist private sector firms at all stages of the supply chain with 1) access to university intellectual property and services, 2) assistance with the commercialization of new technologies, 3) facilitated collaboration with other industry members and Tech Hub partners to bridge existing technology gaps, 4) support the exploration of complementary technologies for specific domains and

applications, and 5) crowdsourcing innovative ideas and technologies. This platform will both drive technological advancements and attract future innovators and partners to the Nevada Tech Hub region from around the world.

5. **Infrastructure, Community Capacity, and Housing:** The primary goals of this project are to pool resources, eliminate siloed approaches, seek out regional partnerships, identify and secure federal and other grants, and create coordinated infrastructure priorities that directly enhance the Nevada Tech Hub region. What is proposed in this project area has not previously existed because there was no immediate need for this level of integrated effort across the region until the emergence of renewable energy and electrification-related industries. The core of the project is the Critical Infrastructure System, which will consist of five aims: 1) expanded and enhanced capabilities of the existing and future Economic Development Districts, 2) develop a key projects database, 3) implement a spatial information and mapping platform (with an emphasis on housing gap analysis), 4) implement infrastructure policy analysis and advocacy program, and 5) create a critical infrastructure toolkit (grant lab program). This project will provide the tools, training, funding, personnel, and information systems necessary to develop capital projects, address supply chain needs, analyze and help fund critical infrastructure components such as water, sewer, broadband, energy and transportation systems, unlocking critical housing supply.
6. **Nevada Native Nations Center:** The Nevada Native Nations Center project, housed within UNR's Office of Indigenous Relations, will have two interrelated aims. The first is ensuring Nevada's federally recognized Native American, Tribal, and Indigenous colonies, communities, and reservations have a full voice in shaping development of this industry and are adequately consulted as the resources that underpin the industry are extracted and utilized. The second is ensuring that the jobs, educational opportunities, and other benefits generated by the industry are equitably made available to Native American Peoples.
7. **Governance and Risk Mitigation:** The Governance project addresses how each of the individual component projects will be coordinated, how the risk mitigation plan will be implemented across the Nevada Tech Hub, how an overarching data collection, analysis and reporting system will be implemented and managed, and how an ongoing policy review, analysis and recommendation process will strive to address "structural" barriers and opportunities to enhance the rates of growth and innovation in the entire industry sector.

### Consortium Members and Additional Partners

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The Nevada Tech Hub Consortium includes: a) all seven of the Regional Development Agencies covering the region, b) both of the EDA Economic Development Districts in the region, c) private businesses involved in the mining, extraction and processing of lithium and other critical elements, d) firms engaged in manufacturing batteries and energy control systems, e) businesses involved in battery and related materials recycling, f) NV Energy, Nevada's largest utility provider, g) private sector venture development entities, h) other institutions across the Nevada System of Higher Education covering a spectrum of activities from technical workforce training to two and four-year degrees to world-class research, i) labor unions, trade associations, and apprenticeship programs, j) local governments, k) industry associations, l) Native American and underrepresented group representation, and m) a variety of nongovernmental organizations. Since receiving Tech Hub designation, Nevada Tech Hub Consortia membership has grown to include other agencies,

firms, organizations. Membership will continue to grow as part of the Phase 2 implementation process.

New Consortium Member(s)	Area of Focus / Member Detail(s)	Contribution
Nevada Business Environmental Program	Economic Development	Provides assistance in battery recycling, addressing environmental issues and offering training to enhance portable battery recycling.
Center for Business and Economic Research at the Lee Business School, University of Nevada, Las Vegas	Education and Workforce Development	Assists in developing and collecting data on the Nevada Tech Hub's overall performance.
Guinn Center for Policy Priorities	NGO	Supports the development and implementation of federal, state, and local public policies to foster business creation, attraction, retention, and expansion within the lithium economy.
University of Nevada, Reno's Department of Geological Sciences & Engineering	University	Enhances efforts to commercialize lab-based R&D that has reached Technology Readiness Level (TRL) 6 or higher, focusing on advanced commercialization and entrepreneurship.
New government Nevada Tech Hub Consortium members	The Nevada Governor's Office of Science, Technology & Innovation / Nevada Department of Corrections / The Nevada Housing Division of the Nevada Department of Business & Industry / The Nevada Office of Workforce Innovation	Streamline, concentrate, and leverage state efforts and resources to grow and diversify the industry.
New industry Consortium members	APEX Accelerators, ITS Logistics, Robinson Mine, Lyten, HiTech Minerals, Inc./Jindalee Lithium, Comstock Metals, Agilent Technologies	Contribute to closing gaps in the existing supply chain and value network of the Nevada Tech Hub.

Each of these new Nevada Tech Hub Consortium members were included because of the unique contribution and important investment and policy commitments that they have pledged to further facilitating achievement of the Nevada Tech Hub's overall mission and vision and strategic goals and objectives.



## Match, Investment, and Policy Commitments

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Over the last 15 years, members and partners of the Nevada Tech Hub Consortium have invested billions of dollars in enhancing and growing Nevada's lithium economy and its associated subsectors. This investment is detailed in various Letters of Commitment submitted with this Phase 2 Implementation application, outlining contributions from public, private, and nonprofit sectors expected over the next five years. The same tax abatement program that attracted Tesla to Nevada is now benefiting other companies aiming to establish or grow their operations in the state. Tesla has surpassed its job creation goal, providing over 3,000 new positions with an average hourly wage of \$33.49. As the initial tax abatements for Tesla begin to expire, the resulting tax revenue will support infrastructure upgrades in the Tahoe Reno Industrial Center, home to Tesla, Panasonic North Americas, Redwood Materials, and other consortium members.

In addition to existing commitments, the Nevada Tech Hub seeks further investment and policy support from its Consortium members and partners for the upcoming five years. Notably, on February 8, 2024, the Interim Finance Committee of the Nevada State Legislature allocated \$7.5 million in state funds as a cash match for the Nevada Tech Hub's Phase 2 application. The University of Nevada, Reno (UNR) has pledged an additional \$1.0 million match to fund the salary of the Regional Innovation Officer and support operations. Private sector members have also promised cash matches and other investments. The Northern Nevada Electrical Joint Apprenticeship and Training Committee (NNEJATC), another consortium member, has committed \$195,550 in cash match funding. These efforts underscore the Consortium's commitment to the Nevada Tech Hub's success and the broader goal of fostering the growth and diversification of Nevada's lithium battery, critical elements, and other EV materials sector. The UNR and the Nevada UCED plan to extend their support beyond the five-year Phase 2 program period, aiming to secure more private, state, and federal funding to advance Nevada Tech Hub-led initiatives further.

## Measurable Goals and Impacts

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The three primary SMART goals of the Nevada Tech Hub are simple but deeply ambitious. By 2029, the Nevada Tech Hub aims to **create 3,000 new businesses** of various sizes and across various industry directly and indirectly related sectors and **expand another 2,000 existing businesses** in ways that close 'gaps' in the supply chain and value network of Nevada's lithium economy, with a special focus on creating opportunities for small business owners, including those owned by individuals from underrepresented groups and veterans, in the process **creating 50,000 new high paying and high skill jobs**. Individual goals and milestones achieved in each of the Nevada Tech Hub's individual initiatives and components will support the achievement of the Nevada Tech Hub's overarching mission and vision and primary goals and objectives. A detailed list of Nevada Tech Hub SMART goals is provided here:

Goal Type / Target Date	Description / Detail
Business Creation (By 2029)	<ul style="list-style-type: none"> <li>● Create 3,000 new businesses of various sizes across different industry sectors.</li> <li>● Expand 2,000 existing businesses to fill supply chain and value network gaps in Nevada's lithium economy.</li> <li>● Focus on enabling opportunities for small businesses, including those owned by underrepresented groups and veterans.</li> </ul>
Employment (By 2029)	<ul style="list-style-type: none"> <li>● Generate 50,000 new high-paying, high-skilled jobs across Nevada's lithium economy that will be needed to close the estimated \$529.1 million annual shortfall in Nevada's current lithium economy value network.</li> <li>● Graduate 55 students from the Nevada Tribal Academy and 250 Native Youth from the Nevada Native Youth L.E.A.D. Program with at least 100 being girls.</li> </ul>
Equity and Career Pathway Development	<ul style="list-style-type: none"> <li>● Develop career pathways for members of organized labor, disadvantaged populations, individuals in remote/economically distressed communities, and veterans.</li> <li>● Ensure equity is a central motivation and a critical factor in achieving the Hub's ambitious targets.</li> </ul>
Innovation and Commercialization (By 2029)	<ul style="list-style-type: none"> <li>● Enhance innovation and commercialization across all sectors of Nevada's lithium economy, including critical minerals production and processing and lithium battery manufacture and recycling.</li> <li>● Eliminate the commercialization 'valley of death' for new entrepreneurs and startups beginning at TRL 6.</li> </ul>
EV Material Recycling Enhancement (By 2029)	<ul style="list-style-type: none"> <li>● Increase the collection, processing, and recycling of EV-related materials, including lithium and other critical elements, across the western and intermountain western U.S.</li> </ul>
Carbon Emission Reduction	<ul style="list-style-type: none"> <li>● Promote electrification of existing activities, including on-site renewable energy production.</li> <li>● By 2029, reduce overall carbon emissions from onsite extractors, processors, and manufacturers.</li> <li>● Develop and implement new technologies to further reduce carbon emissions.</li> </ul>

## Addressing Climate Impacts

The Biden Administration has set an ambitious goal of achieving a carbon pollution-free power sector by 2035 and a net zero emissions economy by no later than 2050, with a primary focus on rapidly scaling up zero emission vehicles<sup>3</sup>. All of the consortium members involved in the lithium economy, from raw material extraction through recycling, have expressed strong support to move towards net-zero operations. Improving their Life Cycle Assessment (LCA) scores not only enhances their standing in both domestic and international markets, but also reduces operational costs by switching to renewable energy sources. Beyond the focus on LCA scores, addressing climate impacts is a priority for all Nevada Tech Hub Consortium members. This is illustrated by the adoption of a tool developed by nZero, a Consortium member, designed to monitor and manage carbon footprints. The City of Reno has implemented nZero's platform, which offers detailed tracking, planning, and forecasting capabilities to support organizations on their journey to net-zero emissions. The Nevada UCED will work to create incentives to encourage more Nevada Tech Hub Consortium members to leverage nZero's innovative platform, underlining a collective move towards more sustainable operations.

<sup>3</sup> The White House. April 20, 2023. *FACT SHEET: President Biden to Catalyze Global Climate Action through the Major Economies Forum on Energy and Climate*. <https://www.whitehouse.gov/briefing-room/statements-releases/2023/04/20/fact-sheet-president-biden-to-catalyze-global-climate-action-through-the-major-economies-forum-on-energy-and-climate/#:~:text=President%20Biden%20has%20set%20an,by%20no%20later%20than%202050.>