# GOVERNOR'S WORKFORCE INVESTMENT BOARD

# CLEAN ENERGY SECTOR COUNCIL

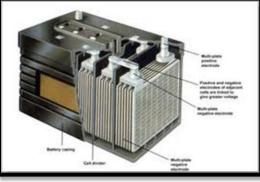
December 6

2013

This document outlines the mission of the Governor's Workforce Investment Board's Clean Energy Sector Council, its strategic focus and its priorities over the next twelve-month planning horizon. Strategic Plan Version 1.0









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#### Introduction

Pursuant to Nevada Revised Statute 232, the Governor's Workforce Investment Board (GWIB) is tasked with establishing regional goals for economic development for each industry sector which is essential to the state. Seven industries have been identified as essential to Nevada's economic future and include the following:

- Health Care and Medical Services
- Mining, Materials and Manufacturing
- Tourism, Gaming and Entertainment
- Logistics and Operations
- Aerospace and Defense
- Information Technology
- Clean Energy

The Clean Energy Sector Council was created to support the GWIB in identifying workforce needs, job training and educational programs that would best meet regional economic development goals within the clean energy sector. This requires continued collaboration with education partners, government, labor and industry stakeholders. To fulfill its mission, the Clean Energy Sector Council members and staff will work together to accomplish the following:

- Guide the development of a system of workforce development specific to the Clean Energy Sector that responds to the lifelong learning needs of Nevada's workforce;
- Advise the GWIB on workforce development policy;
- Encourage public/private partnerships and facilitate innovations in workforce development policy and practices; and
- Ensure a quality workforce system by evaluating results and supporting high standards and continuous improvement.

This strategic plan identifies the goals and strategies of the Clean Energy Sector Council and will serve as a roadmap for supporting businesses within the clean energy sector to meet their human resource needs.

# **Clean Energy Sector Defined**

Unfortunately there is no universal definition of the term "clean energy" and its meaning can vary widely based on the context in which it is used. For the purposes of providing clarity around the scope of the GWIB Clean Energy Sector, the following definition has been borrowed from the Massachusetts Institute of Technology (MIT):

Clean Energy is defined as technologies, services or processes that broadly reduce energy consumption and/or enable the transition to a renewable-based energy economy by increasing the supply of renewable energy, improving the efficiency of energy utilization at the consumer and industrial scale, improving the processes and systems that use energy, or more effectively enabling energy solutions to permeate the marketplace.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> MIT Clean Energy Prize, <a href="http://cep.mit.edu/structure/categories">http://cep.mit.edu/structure/categories</a>.

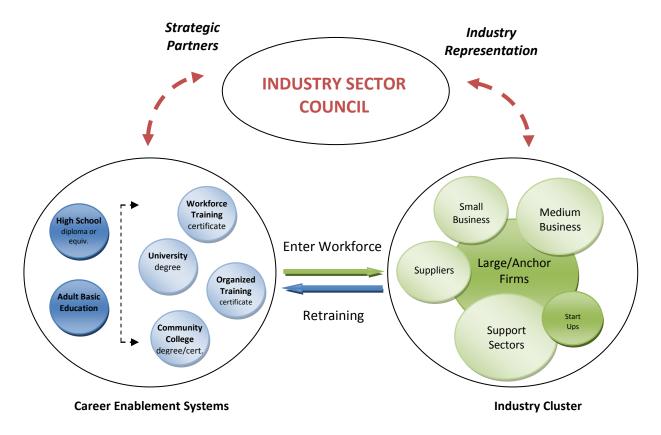
Although this definition could still be viewed as broad, it is less so than leaving the term undefined and provides boundaries around the Clean Energy Sector's areas of focus which include renewable energy, energy efficiency, and associated infrastructure and resources that enable the effective development and deployment of these industries.

# **Clean Energy Sector Council Mission and Purpose**

Broadly speaking, the mission of the Clean Energy Sector Council is as follows:

To address common needs of employers within the clean energy sector and to generate coordinated solutions that benefit workers by aligning education and training with industry needs to produce readily employable workers.

The membership of the council is intentionally broad (see Appendix I) in order to bring together the diverse experience and viewpoints of government, education, training, economic development, labor, community organizations and business in order to focus on the needs of critical industries and workers within the clean energy sector. The Clean Energy Sector Council serves as a conduit between the clean energy industry and career enablement systems to ensure workforce training and development programs are aligned with industry needs and provide a continuous supply of qualified talent to meet those needs.



Additional responsibilities of the Clean Energy Sector Council include the following:

 Developing and maintaining an updated sector strategic plan to support businesses in meeting their human resource needs.

- Mapping the talent pipeline for the sector and identifying where the talent needed will come from now, in the near-term, and in the future.
- Analyzing and applying workforce intelligence to develop sector-wide strategies to improve the talent pipeline.
- Seeking to increase the quantity and quality of the talent pool for the sector so individual employers will have a better talent pool to tap.
- Defining career pathways for individuals that will ensure a continuous supply of qualified talent.
- Communicating the skills needed by the sector to the public and private workforce, education and training organizations so these suppliers may improve responsiveness and better prepare workers for the sector.
- Implementing specific projects that will assist the sector in improving current and potential talent.
- Identifying (and seeking removal of) regulatory barriers that stand in the way of talent acquisition, expansion, and retention.

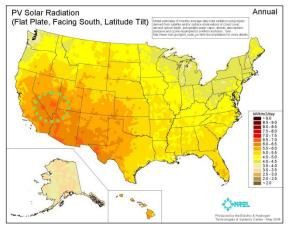
# NRS 232.935 states the Clean Energy Sector Council shall:

"...identify job training and education programs which the industry sector council determines to have the greatest likelihood of meeting the regional goals for economic development established for that industry sector [by the Governor's Workforce Investment Board]..."

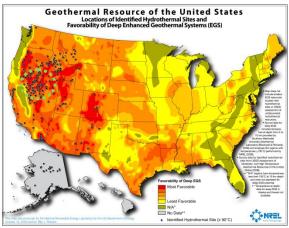
 Generating public and private resources (including, but not limited to, grants) to support sector's work and projects.

# **Clean Energy Sector Opportunities for Nevada**

Nevada is home to abundant natural resources that provide the state with a clear strategic advantage within several clean energy sector categories. Most notably, southern Nevada is flooded with over 250 days of sunshine a year and is home to one of the best solar resources in the world. Northern Nevada is similarly blessed when it comes to geothermal energy. Second only to California in geothermal output, Nevada's 14 geothermal power plants have a combined 426 megawatts of electric production capacity, which over the course of a year provides about 7 percent of the state's electricity.<sup>2</sup>



**Annual PV Solar Radiation** 



Geothermal Resources of the U.S.

<sup>&</sup>lt;sup>2</sup> Natural Resources Defense Council, <a href="http://www.nrdc.org/energy/renewables/nevada.asp">http://www.nrdc.org/energy/renewables/nevada.asp</a>

The Nevada legislature enacted its first renewable portfolio standard (RPS) in 1997, and has raised the bar several times since then. The current standard requires utilities to generate 25 percent of their power from renewable sources by 2025, with 6 percent to come from solar energy by 2016.<sup>3</sup> The state also recently passed Senate Bill 123 (SB 123) which will accelerate the phase-out of coal as a source of electrical generation and encourage the development of new renewable energy capacity. Nevada currently leads the nation with more solar power generation per capita than any other state in the nation and has a solid pipeline of solar projects under development, including utility-scale concentrating solar power plants such as the 110 MW Crescent Dunes Solar Energy Project located near Tonopah, Nevada. The combination of SB 123 and the RPS creates on-going demand for renewable energy projects in Nevada and presents an opportunity in terms of project development and job creation.

The energy storage industry is poised for substantial growth in the coming decades as the electric vehicle charging industry begins to take hold, as more and more electronic devices require batteries and as the utility industry begins to integrate energy storage into grid design as a means of shedding peak load and stabilizing electrical networks. Lithium ion batteries are popular due to their low-density and high energy-storage capability. The United States currently imports more than 80% of the lithium it uses and according to a U.S. Geological Survey publication on lithium, "The only commercially active lithium mine in the United States was a brine operation in Nevada." Having one of the only lithium resources in the U.S. affords Nevada a unique opportunity to leverage this natural resource and develop a vertically integrated battery storage industry that is a critical component of a clean energy economy.

In addition to indigenous renewable resources, Nevada was early to understand the benefits of energy-efficient building design and adopted legislation to aggressively encourage green building through a variety of tax advantages. Over the years, as the green building industry has matured, the Nevada legislature has reduced the tax incentives associated with green building; however, that has not deterred a significant number of U.S. Green Building Council Leadership in Energy & Environmental Design (LEED) projects. In fact, Nevada ranks 28th in the nation with 391 commercial buildings that are LEED registered and certified, totaling more than 224 million square feet.<sup>6</sup> Nevada is also home to some of the largest LEED certified projects in the world.

Nevada is home to more than 224 million square feet of LEED registered and certified green building space which is equivalent to the square footage of over 81 Empire State Buildings<sup>4</sup>



**UNLV Desert Sol** 

Another boost to Nevada's green building sector recently resulted from the participation of the University of Nevada, Las Vegas (UNLV) in the Department of Energy's Solar Decathlon competition. UNLV students competed against other students from colleges and universities across the globe in what has been termed the "Olympics of green home design" and ended up finishing in second place overall with their Desert Sol design. UNLV was the only U.S. team to place in the top three and ended up beating out teams from

<sup>&</sup>lt;sup>3</sup> Natural Resources Defense Council, http://www.nrdc.org/energy/renewables/nevada.asp

<sup>&</sup>lt;sup>4</sup> US Green Building Council, Industry Brief, Nevada, January 2013

<sup>&</sup>lt;sup>5</sup> Resource Investor, John Daly, May 2, 2013 (http://www.resourceinvestor.com/2013/05/02/new-wyoming-lithium-deposit-could-meet-all-us-dema)

<sup>&</sup>lt;sup>6</sup> US Green Building Council, Industry Brief, Nevada, January 2013

other prestigious institutions such as MIT. This was an amazing accomplishment that shed light on UNLV's strength in engineering, architecture, renewable energy, efficiency and sustainable design.

# **Strategic Assessment and Focus**

The "Clean Energy Sector" could be very broadly defined; however, our sector council believes that in order to be effective at carrying out our mission, our focus needs to be targeted at identify job training

# **Nevada Strategic Advantages**

- ✓ Geographically one of the world's best solar resources
- ✓ Aggressive renewable energy portfolio standards
- ✓ A geothermal "hotspot" second only to California in geothermal energy production
- An early adopter of green building certifications and construction
- ✓ A long history of construction-related industry
- ✓ Favorable tax advantages for green building.
- ✓ A pipeline of utility-scale solar projects under development
- ✓ One of the only lithium mining operations in the United States
- ✓ Global recognition of efficient design and capability resulting from UNLV's second-place finish in the DOE Solar Decathlon

and education programs that have the greatest likelihood of supporting regional goals for economic development. Therefore, we have narrowed our definition of "clean energy" to address opportunities that fall within the categories of renewable energy, energy efficiency, and related infrastructure and resources that enable the effective development of these industries. Within these categories, we have further narrowed our focus by identifying four "industry clusters" that align nicely with several strategic advantages Nevada has to offer. They include: (1) Solar Energy; (2) Geothermal Energy: (3) Green Building; and (4) Battery Storage. These four clusters have natural geographic alignment within the state based on a combination of natural resource availability and existing development and infrastructure.

Geographically speaking, solar energy and green building clusters are well positioned for growth in southern Nevada while geothermal energy and battery storage are natural fits for the north.

The primary value of focusing on industry clusters is to align limited resources on cultivating clean energy industries that have a strong probability of success in Nevada. The cluster approach provides a

good balance between being targeted enough for success yet flexible enough to provide for a variety of job growth and economic development opportunities. For example, rather than broadly focusing on the renewable energy industry, directing efforts more specifically at the solar and geothermal industries provides a better chance of creating a critical mass of expertise, programs, businesses and supporting infrastructure for those subsectors to flourish. Yet even with this focus, the solar and geothermal energy clusters are still broad enough to provide a breadth of job growth opportunities ranging from research and development to manufacturing to sales and call centers to operations and maintenance. A focus on developing training and



education programs to promote the growth of our identified clean energy sector clusters will be a core component of our strategic effort going forward.

Our sector council is made up of a diverse cross-section of business, education, research, government and labor professionals. The membership of the council is one of its biggest strategic assets as the knowledge and insight of the members can be leveraged to help the council effectively carry out its

mission. One of the early exercises of the council was an assessment of the skill sets and competencies needed within the clean energy sector in the near-term, mid-term and long term. The results of this assessment most relevant to our four priority industry clusters are summarized below.

Table 1: Skill Gap Assessment – Clean Energy Sector

| Short-Term  | Mid-Term  | Long-Term   |
|---|---|---|
| <ul> <li>Improved core educational skills including math, reading, communication, comprehension and writing</li> <li>Basic science understanding</li> <li>Basic computer skills</li> <li>Basic math skills</li> <li>Working knowledge of technologies</li> <li>Skill upgrades in energy efficiency</li> <li>Apprenticeship programs in the building performance industry</li> </ul> | <ul> <li>Emphasis on children becoming better trained in the sciences and technologies</li> <li>Funding research opportunities to find optimum solutions and techniques for Nevada's climates</li> <li>Integrating "lean" processes, strategies and techniques in existing curriculum to create a foundation for a "green" workforce</li> </ul> | <ul> <li>Robust training facilities with innovative labs and research capacity for advanced learning</li> <li>Advanced training in power electronics</li> <li>Specialized training for operating and maintaining solar power plants</li> <li>Creation of a robust Sciences, Technology, Engineering and Mathematics pipeline for youth</li> </ul> |

To be successful in achieving its mission, the Clean Energy Sector Council must keep in mind these "skill gaps" that exist and ensure that recommendations that are ultimately made to the GWIB help address these fundamental workforce deficiencies. In addition to these specified skill gaps, an assessment was also completed to determine other gaps that must be initially tackled as part of our strategic effort.

Table 2: Strategic Opportunity Gap Analysis – Clean Energy Sector

| Strategic Opportunity  | Gap  |
|--|--|
| Support the growth of the identified clean energy sectors by generating coordinated solutions that benefit workers by aligning education and training to produce readily employable workers.                                   | A coordinated, focused effort does not exist to aggressively promote the growth and development of Solar Energy, Geothermal Energy, Green Building, and Battery Storage sector cluster workforce.            |
| Provide good data and industry expertise to stakeholders to allow better decision-making.  | A need for sector/cluster specific information regarding industry needs/requirements exists. Additionally, existing programs and curriculum are not readily categorized to support business needs.           |
| Align policies and systems with regard to economic development within the state in order to optimize training & development funding.   | Better coordination amongst economic development agencies and stakeholders is needed to better understand industry pipeline needs and opportunities.   |
| Obtain industry viewpoints on strengths, weaknesses, opportunities and threats that would enhance economic development within our sector.  | More input and representation from targeted industry clusters is required in order to better understand their needs and perspective.   |
| Create a centralized clearinghouse that contains information on available training and development resources, industry stakeholders and other relevant information to support economic development within our industry sector. | A multitude of resources, curriculum and training programs exist within our sector; however, no centralized clearinghouse exists to access these resources and to understand the extent to which they exist. |
| Cultivate business champions to promote the sector/cluster approach to addressing economic development and industry needs.   | A general lack of knowledge exists regarding the GWIB sector councils as well as other stakeholder groups and their collective mission.  |

In addition to filling the identified gaps, in order to successfully carry-out our mission, the Clean Energy Sector Council must develop a shared message to ensure constituents and stakeholders understand our goals and strategies. This will include a type of "elevator speech" that can be effectively communicated by all sector council members. The strategic effort must also include a tracking mechanism to measure success and to highlight opportunities for improvement. Metrics associated with this tracking mechanism are discussed in the "Strategic Execution" Section which follows.

# **Strategic Execution**

The basis of our strategic plan is to effectively address the identified gaps while focusing our Clean Energy Sector Council's efforts toward meeting the training and development needs of our identified sector clusters. This strategy must be dynamic and will evolve over time in order to meet needs that arise in an ever-changing environment. To execute our strategy, our sector council created a series of subcommittees that will be chaired and staffed by sector council members. These subcommittees, and their respective charters, are summarized below with current chairs and membership identified in Appendix II.

**Table 3: Clean Energy Sector Subcommittees and Charter** 

| ** Identify the critical jobs, skills and competencies needed by the workforce within the targeted clean energy sector clusters     ** Complete a supply and demand analysis     ** Coordinate with economic development agencies, including the Governor's Office of Economic Development (GOED), to ensure alignment     ** Prioritize training and development opportunities within our sector clusters that have the greatest opportunity of supporting economic development objectives     ** Collaborate with other subcommittees to align strategies and leverage collective efforts     ** Provide regular updates and recommendations regarding workforce pipeline opportunities and industry training and development needs to the Clean Energy Sector Council    Identify and prioritize potential public policy to be addressed during the next Legislative Session     ** Coordinate with GOED and DETR on issues related to legislation, regulation and policy     ** Identify and recommend legislation and policy that will address barriers and provide funding to support the development of robust clean energy sector clusters     ** Work with the legislature to support policy that supports our sector mission     ** Collaborate with other subcommittees to align strategies and leverage collective efforts     ** Provide regular updates and recommendations regarding changes to legislation, regulation or policy to the Clean Energy Sector Council     ** Identify and map the existing curriculum, training programs, certifications that support development of the clean energy sector clusters | SUBCOMMITTEES                 | CHARTER  |
|---|-------------------------------|--|
| within the targeted clean energy sector clusters  Complete a supply and demand analysis  Coordinate with economic development agencies, including the Governor's Office of Economic Development (GOED), to ensure alignment  Prioritize training and development opportunities within our sector clusters that have the greatest opportunity of supporting economic development objectives  Collaborate with other subcommittees to align strategies and leverage collective efforts  Provide regular updates and recommendations regarding workforce pipeline opportunities and industry training and development needs to the Clean Energy Sector Council  Identify and prioritize potential public policy to be addressed during the next Legislative Session  Coordinate with GOED and DETR on issues related to legislation, regulation and policy  Identify and recommend legislation and policy that will address barriers and provide funding to support the development of robust clean energy sector clusters  Work with the legislature to support policy that supports our sector mission  Collaborate with other subcommittees to align strategies and leverage collective efforts  Provide regular updates and recommendations regarding changes to legislation, regulation or policy to the Clean Energy Sector Council  Identify and map the existing curriculum, training programs, certifications that support development of the clean energy sector clusters  | 30BCOMMITTEES                 | 5.11 titl 21   |
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| <ul> <li>Legislative/Regulation/Policy</li> <li>Identify and recommend legislation and policy that will address barriers and provide funding to support the development of robust clean energy sector clusters</li> <li>Work with the legislature to support policy that supports our sector mission</li> <li>Collaborate with other subcommittees to align strategies and leverage collective efforts</li> <li>Provide regular updates and recommendations regarding changes to legislation, regulation or policy to the Clean Energy Sector Council</li> <li>Identify and map the existing curriculum, training programs, certifications that support development of the clean energy sector clusters</li> </ul>  | Legislative/Regulation/Policy |  |
| Legislative/Regulation/Policy  provide funding to support the development of robust clean energy sector clusters  Work with the legislature to support policy that supports our sector mission  Collaborate with other subcommittees to align strategies and leverage collective efforts  Provide regular updates and recommendations regarding changes to legislation, regulation or policy to the Clean Energy Sector Council  Identify and map the existing curriculum, training programs, certifications that support development of the clean energy sector clusters   |                               | -  |
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| Identify and map the existing curriculum, training programs, certifications that support development of the clean energy sector clusters  |                               | Provide regular updates and recommendations regarding changes to             |
| that support development of the clean energy sector clusters  |                               | legislation, regulation or policy to the Clean Energy Sector Council         |
| •   |                               | Identify and map the existing curriculum, training programs, certifications  |
|   | Education and Training        | that support development of the clean energy sector clusters                 |
| <ul> <li>Identify and prioritize gaps in the existing curriculum, training programs,</li> <li>certifications that must be addressed to support development of the clean</li> </ul>  |                               |  |
| energy sector clusters  |                               | · · · · · · · · · · · · · · · · · · ·  |

|                           | <ul> <li>Collaborate with K-12 (including the Clark and Washoe County School Districts) to emphasize the importance of core STEM training and to promote a more robust emphasis on STEM curriculum.</li> <li>Collaborate with post-secondary educators to review common core standards and specialized training needed to support the development of a clean energy cluster workforce</li> <li>Develop orientation materials for K-12 counselors to introduce career opportunities within the clean energy sector with an emphasis on the targeted cluster industries</li> <li>Identify job shadowing opportunities and integrate sector cluster information into local job fairs</li> <li>Collaborate with other subcommittees to align strategies and leverage collective efforts</li> <li>Provide regular updates and recommendations regarding sector cluster education, training and development deficiencies and priorities to the Clean</li> </ul> |
|---------------------------|---|
|                           | Energy Sector Council   |
| Grants and Resources      | <ul> <li>Schedules regular meetings with DETR staff to discuss and pursue funding opportunities</li> <li>Identify, recommend and support applications for federal and other funding opportunities available for clean energy sector training, development and education programs</li> <li>Provide guidance and intelligence to DETR to support the development of competitive grant applications</li> <li>Identify and facilitate collaborative opportunities with public and private entities to pursue relevant clean energy sector workforce development programs and funding</li> <li>Collaborate with other subcommittees to align strategies and leverage collective efforts</li> <li>Provide regular updates and recommendations regarding sector cluster grant and resource priorities to the Clean Energy Sector Council</li> </ul>  |
| Research and Coordination | <ul> <li>Assist all Clean Energy Sector Council Subcommittees in providing necessary data to support their efforts</li> <li>Regularly communicate with other sector councils to leverage best practices and ensure coordination</li> <li>Research efforts of other state sector councils and identify and communicate winning strategies being deployed that may enhance sector council performance</li> <li>Inventory clean energy sector related research being done within the higher-learning institutions within the state in order to leverage it to help meet the sector council's mission</li> <li>Coordinate with economic development agencies and state offices (including GOED and DETR) to keep abreast of relevant information and data</li> <li>Identify and fill data gaps needed to support the sector council's mission</li> <li>Provide regular updates and recommendations to the Clean Energy Sector Council</li> </ul>              |

In addition to the standing subcommittees above, special subcommittees will be formed from time to time in order to complete required tasks and activities that support the Clean Energy Sector Council's mission. The subcommittees are the critical to the success of the Clean Energy Sector Council. The subcommittees will be responsible for developing and implementing strategies to effectively meet the

council's mission in accordance with their charters, which will be updated and modified from time to time to reflect the needs of the GWIB.

#### Twelve Month Action Plan

To make clear near-term priorities for the Clean Energy Sector Council, the following table summarizes tasks and assignments which will be completed by council subcommittees over the next 12-months. Note that although specific subcommittees may be assigned responsibility, coordination must occur with DETR and other subcommittees as they, and all council members, will share responsibility in completing the identified tasks.

**Table 4: Clean Energy Sector Council Twelve Month Action Plan** 

| Task/Assignment   | Responsible Party                           | Targeted<br>Completion |
|---|---|------------------------|
| Maintain communication with GOED to determine workforce training needs of companies by having a minimum of quarterly meetings/conference calls.   | Research and Coordination                   | On-going               |
| Develop an inventory of existing companies and targeted companies within the identified clean energy sector clusters and determine their critical jobs and demanded skill sets and competencies.                                      | Workforce Needs and<br>Economic Development | Q2 2014                |
| Develop an inventory of existing training programs, curriculum, certifications and programs that specifically support workforce development within the targeted clean energy sector clusters.   | Education and Training                      | Q2 2014                |
| Complete an industry-specific survey, with specific emphasis on characterizing opportunities within the identified sector clusters and identifying deficiencies that exist with regard to workforce needs.                            | Research and Coordination                   | Q3 2014                |
| Identify and apply for funding sources for training and education and generate resources to support the sector's work and projects  | Grants and Resources                        | On-going               |
| Identify critical legislation and policy needed to support workforce development within the identified clusters   | Legislative/Regulatory/Policy               | Q3 2014                |
| Coordinate annual economic development summit for all stakeholders with a focus on obtaining perspective on training and development needs of our sector.   | Workforce Needs and<br>Economic Development | Q4 2014                |
| Actively recruit members from our targeted clean energy clusters to our Clean Energy Sector Council.  | All   | Q1 2014                |
| Develop a centralized, on-line platform that brings together all resources, stakeholders, training programs and curriculum within our sector so that they can be readily accessed.  | Research and Coordination                   | Q4 2014                |
| Complete aggressive outreach to business leaders/stakeholders to make them aware of our sector council and our mission. Leverage member connection and create a network of business "champions" that are aligned with our objectives. | All   | Ongoing                |
| Implement Pilot training program to support workforce development within one of the targeted sector clusters  | TBD/AII                                     | Q3 2014                |
| Update Strategic Plan   | Chair/All                                   | Q4 2014                |

#### **Metrics**

In order to drive successful outcomes, it is important to have a scorecard to monitory progress, identify deficiencies and celebrate accomplishments. The outcome-based, macro-level metrics summarized in Table 5 have been identified to track progress of the Clean Energy Sector Council activities.

**Table 5: Metrics** 

| Metric   | Description  |
|--|--|
| Number Persons Trained                                     | <ul> <li>Identifies the number of persons trained through programs that are targeting workforce development within the Clean Energy Sector, and more specifically, within the priority Clean Energy Clusters.</li> <li>Tracking number of persons trained provides an indicator of the success at developing a skilled workforce within the Clean Energy Sector.</li> </ul>  |
| Number of Persons Placed                                   | <ul> <li>Identifies the number of persons that are placed within the Clean Energy Sector, and more specifically, the targeted Clean Energy Clusters, as a result of training or development programs completed or funding received. Also includes jobs created as a result of new businesses developed, relocated or expanded as a result of sector infrastructure and support.</li> <li>Tracking the number of persons placed within the Clean Energy Sector is where "the rubber hits the road" and is a critical metric to track success of the Clean Energy Sector Council's mission.</li> </ul> |
| Amount of Funding and Resources Obtained                   | <ul> <li>Tracks the dollar value, or in-kind dollar equivalent, of grants, gifts, fundraising, legislatively directed resources, or other resources obtained to support the sector mission.</li> <li>This metric provides an indicator of how effectively resources are pursued and obtained in order to support workforce development within the Clean Energy Sector.</li> </ul>  |
| Number of New<br>Programs/Training Curriculum<br>Developed | <ul> <li>Tracks the number of new programs, curriculum, training or pilots developed to promote the development of a Clean Energy Sector workforce.</li> <li>The metric will provide an indication of how successful efforts are to develop programs targeted at meeting the workforce development needs of the Clean Energy Sector.</li> </ul>  |

This strategic plan, and the information contained herein, will be periodically updated, but no less than annually, to reflect the priorities of the GWIB and the Clean Energy Sector Council.

#### APPENDIX I

#### **GWIB Clean Energy Sector Council Membership**

#### Membership

Chair – Eric Dominguez, Caesars Entertainment Vice-Chair – Dr. Thomas Piechota, University of Nevada, Las Vegas

Ron Fletcher, Department of Employment, Training and Rehabilitation

Timothy Breed, Plumbers and Pipefitters Union #525

Chris Brooks, Bombard Electric

Debra Gallo, Southwest Gas

Jordan Pinjuv, Public Utilities Commission

Robert Feibleman, Nevada HAND / HAND Construction

Michael Purtill, Tate Snyder Kimsey

Dr. Emmanuel Maragakis, University of Nevada, Reno

Dr. Alan Gertler, Desert Research Institute

Dan Gouker, College of Southern Nevada

Brita Tryggi, Nevada State Office of Energy

Councilwoman Anita Wood, City of North Las Vegas Ward 3

Commissioner George Rowe, Lincoln County

Councilwoman Peggy Leavitt, City of Boulder City

Bonnie Lind, Governor's Office of Economic Development

Les Lazareck, Home Energy Connection

David Miller, Clark County School District

Susan Fisher, Valley Electric Association

Jennifer Turchin, Sellen Sustainability

Senator Patricia Spearman, Nevada State Senate

Amelia Gulling, Desert Research Institute

George Rhee, University of Nevada, Las Vegas

Dr. Jim Faulds, University of Nevada Reno

Dr. Ghassan Jabbour, University of Nevada, Reno

Jack McGinley, NV Energy

Emilia Cargill, Coyote Springs Land

Edward Domanico, AET Environmental

Christopher Zunis, Las Vegas Global Economic Alliance

#### **Ex-officio members**

Jeremey Hayes, DETR Bureau of Research and Analysis (Economist)
Jaime Cruz, Workforce Connections (Southern Nevada Workforce Investment Board)
John Thurman, Nevadaworks (Northern Nevada Workforce Investment Board)
Maribeth Stumpf, Nevada Job Connect
William Boster, DETR Vocational Rehabilitation

#### **Workforce Solutions Unit Staff**

Earl McDowell, Deputy Administrator
Tatjana Vukovic, Management Analyst
Ansara Martino, Grants and Policy Analyst
Odalys Carmona, Youth Liaison
De Salazar, Program Specialist
Doug Van Aman, Program Specialist
Derita Hopkins, Administrative Assistant

#### **APPENDIX II**

#### Sector Council Subcommittee Chairs and Membership

#### **Workforce Needs and Economic Development Subcommittee**

Councilwoman Anita Wood \*Chair Bonnie Lind Peggy Leavitt Jaime Cruz Dr. George Rhee

#### 2013-2014 Strategic Planning

Eric Dominguez \*Acting Chair as of 10/14/13 Senator Patricia Spearman \*Previous Chair

#### **Legislative/Regulation/Policy**

Les Lazarek \*Chair Susan Fisher Brita Tryggvi

#### **Education and Training**

Dan Gouker \*Chair
Odalys Carmona (WSU Staff)

#### **Grants and Resources**

Amelia Gulling \*Chair
David Miller
Emilia Cargill
Ansara Martino (WSU Staff)

#### **Research and Coordination**

Dr. Thomas Piechota \*Chair Dr. Alan Gertler