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Renewable Energy Legislation in Nevada: 2017 - 2021

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PURPOSE:

The purpose of this fact sheet is to summarize legislative actions from the biennial 79th, 80th, and 81st Nevada Legislative Sessions (2017, 2019, and 2021) regarding solar energy production and state efforts to reach 50 percent energy production from renewable sources by 2030.[1] By 2050, Nevada has a statutorily mandated obligation to be a net-zero carbon producer in fulfilling energy production needs from large scale utility services.[2]

ABOUT THE DATA:

The Nevada Electronic Legislative Information System (NELIS) provides detailed information on legislation from the three most recent regular sessions of the Nevada Legislature (2017, 2019, and 2021). NELIS allows users to view bill language, recorded votes, public comment, fiscal notes, scheduled hearings, supplemental legislative material, and other actions that track activity from a bill's introduction through its life cycle. We identified bills that focused on "renewable energy," "solar energy," "energy efficiency" and other keywords related to the state's Renewable Portfolio Standard (RPS). Many pieces of legislation allow for enhanced regulations to be established by the Public Utilities Commission of Nevada (PUCN) to advance a transition towards more renewable energy generation in Nevada.

KEY TERMS:

Solar Power	Energy from the sun that is converted into thermal or electrical energy.
Megawatt (MW)	A unit for measuring power that is equivalent to one million watts of electricity. An average Nevada home consumes an estimated 20 kilowatt a month, or just 2 percent of a megawatt. One megawatt can power roughly 50 Nevada homes for a month.
Public Utilities Commission of Nevada (PUCN)	The unit responsible for regulating utility providers in the state, including NV Energy (the state's largest electric utility provider).
Fiscal Note	An estimate of the costs that are not included in the governor's proposed executive budget that are submitted by an affected state entity.
Community Solar	Local solar facilities that are supported by community subscribers who receive credit on their energy bills for their solar power generation.
Renewable Portfolio Standard (RPS)	A regulatory mandate to increase production of energy from renewable sources to a specified level.

KEY FINDINGS:

1. In each legislative session, the Nevada Legislature passed into law approximately half of the bills introduced regarding energy production and solar capabilities.
2. Legislator Chris Brooks (D-Clark County)[3] introduced almost one-third of all bills on energy production and solar energy in Nevada over the course of three legislative sessions.
3. SB448 (2021) requires Nevada to reach an RPS of 50 percent by 2030 and be a net-zero carbon producer by 2050.

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[1] Referred to as the renewable portfolio standard (RPS).
[2] See the Nevada Public Utilities Commission "Renewable Portfolio Standard," 2021, https://puc.nv.gov/Renewable_Energy/Portfolio_Standard/.
[3] Legislator Chris Brooks served as a Member of the Nevada Assembly from 2016 to 2018 and was elected to the Nevada Senate in 2018, thus he has introduced legislation in both the Nevada Assembly and Senate on the topic of renewable energy.

Renewable Energy Legislation from the 79th Session (2017)

Of the five bills related to renewable energy introduced during the 2017 session, Governor Brian Sandoval approved three bills and vetoed two. Assemblyman Chris Brooks (2), Senator Pat Spearman (D-Clark County) (2), and Senator Mo Denis (D-Clark County) (1) introduced legislation. No fiscal notes were placed against these bills, indicating that state and local government agencies did not project any costs associated with bill passage and implementation.

Table 1: Renewable Energy Bills from the 79th (2017) Nevada Legislative Session

Bill	Primary Sponsor	Summary	Fiscal Note	Outcome
AB206	Assemblyman Brooks	Boosts Nevada's RPS to 40 percent by 2030.	None	Vetoed by Governor Sandoval on June 16, 2017.
AB405	Assemblyman Brooks	Establishes credit structure for net metering; establishes the Renewable Energy Bill of Rights; includes other provisions regarding net metering for residential and small businesses customers who generate 25 kilowatts or less of energy.	None	Approved by Governor Sandoval; effective June 15 and September 1, 2017.
SB146	Senator Spearman	Requires utility companies to submit to the PUCN a distributed resources plan; intent is to ensure that utility providers can meet energy demand with a mix of energy sources.	None	Approved by Governor Sandoval; effective July 1, 2017.
SB150	Senator Spearman	Requires the PUCN to establish annual energy savings goals for utility providers; goals must be cost effective and obtainable; at least 5 percent of expenditures related to these goals must be invested for residential use in low-income neighborhoods.	None	Approved by Governor Sandoval; Effective June 15 and July 1, 2017.
SB392	Senator Denis	Establishes community solar in Nevada; modifies incentive structures for three renewable energy programs overseen by the PUCN; repeals the Lower Income Solar Energy Pilot Program.	None	Vetoed by Governor Sandoval on June 16, 2017.

Source: Adapted from an analysis of the Nevada Electronic Legislative Information System (NELIS)

AB206, introduced by Assemblyman Brooks, sought to increase Nevada's RPS to 40 percent by 2030. Governor Sandoval vetoed the measure. In his veto message[4], Governor Sandoval cited uncertainty over increases in ratepayers' energy bills, increases in costs for large employers who opt-out of the Nevada power grid, and uncertainty over the "Energy Choice" ballot initiative which was overwhelmingly supported by Nevada voters during the 2016 election and was expected to pass in 2018 as well. Subsequent legislation in the 2019 session (SB358) and ballot initiatives during the 2018 and 2020 election cycles codified into statute and the Nevada Constitution an RPS of 50 percent by 2030.

Assemblyman Brooks introduced AB405 to restart net metering in Nevada. In 2015, a net-metering cap of 235-megawatts was reached, and new solar customers were no longer able to connect to Nevada's power grid for solar energy credits. Their ability to sell excess solar energy to the grid on new residential and commercial installations was no longer available, which curtailed new solar panel installation in Nevada.[5] AB405 was a compromise between NV Energy and solar companies regarding the rate of reimbursement for solar customers who return excess energy

[4] See, Office of the Governor, "Assembly Bill 206 of the 79th Legislative Session," June 16, 2017, https://gov.nv.gov/uploadedFiles/govnvgov/Content/News_and_Media/Press/2017_Images_and_Files/AB206VETO.pdf.
[5] See, Kyle Roerink, "Rooftop solar cap reached," *Las Vegas Sun*, August 21 2015, https://lasvegassun.com/news/2015/aug/21/nv-energy-rooftop-solar-cap-will-be-hit-saturday.

production to the grid.[6] The bill applies to residential and small-business customers who produce 25 kilowatts or less of energy and establishes the Renewable Energy Bill of Rights.

Senator Spearman introduced, and Governor Sandoval signed into law, SB146. The bill requires utility companies to submit a distributed resources plan report every three years to the PUCN. This ensures that an energy utility can meet customer demand using a mix of alternative energy sources, including solar energy.

Senator Spearman's SB150 requires the PUCN to create annual savings goals for utilities to provide more efficient energy production and transmission. The goals must be cost effective and obtainable, and at least 5 percent of expenditures for greater energy efficiency must be invested in low-income neighborhoods. Governor Sandoval signed the bill into law.

Governor Sandoval vetoed SB392, a bill introduced by Senator Denis. The bill sought to establish community solar energy in Nevada and modified the incentive structure for the Solar Energy Systems Incentive Program, the Wind Energy Systems Demonstration Program, and the Waterpower Energy Systems Demonstration Program. The bill also repealed provisions for a Lower Income Solar Energy Pilot Program. In his veto message,[7] Governor Sandoval stated that SB392 could complicate Nevada's evolving energy transition and argued that rooftop solar was like a public utility but did not face the regulations of a public utility entity. Also, NV Energy is required to purchase excess community solar power generation at an above-market rate. To that end, SB392 "could create a perverse incentive to create solar gardens at the expense of commercial solar facilities, doing more harm than good."[8]

Renewable Energy Legislation from the 80th Session (2019)

Eleven bills pertaining to renewable energy regulation and their wider interactions with existing state policy were introduced during the 2019 legislative session. Senator Chris Brooks (5), Assemblywoman Jill Tolles (R-Washoe County) (1), Senator Mo Denis (1), Senator Joe Hardy (R-Clark County) (1), Senator James Ohrenschall (D-Clark County) (1), the Senate Committee on Finance (1), and the Assembly Committee on Growth and Infrastructure (1) sponsored bills. Five of the eleven bills became law.

AB321, introduced by Assemblywoman Tolles, requires certain electric utilities to submit a tariff containing provisions authorizing approved contractors to install a line extension linking a residential net metering system with the electrical grid. Additionally, the bill includes provisions to require lenders to factor in the energy cost savings a borrower will receive from a solar energy system when issuing a home loan. The bill carried no fiscal note and did not receive a hearing.

The Assembly Committee on Growth and Infrastructure introduced AB465, a bill that expanded the use of residential solar energy by requiring certain electric utilities to offer expanded solar access plans. This included broadening access to solar energy in an equitable manner and providing low-income residential customers with lower rates. The bill carried no fiscal note and was signed into law, effective October 1, 2019.

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[6] See, Jeff Brady "Solar Firms Plan to Return to Nevada After New Law Restores Incentives," National Public Radio, June 7, 2017, www.npr.org/sections/thetwo-way/2017/06/07/531952407/solar-firms-plan-to-return-to-nevada-after-new-law-restores-incentives.
[7] See, Office of the Governor, "Senate Bill 392 of the 79th Legislative Session," June 16, 2017, https://gov.nv.gov/uploadedfiles/govnvgov/Content/News_and_Media/Press/2017_Images_and_Files/SB392VETO.pdf.
[8] Ibid.

Table 2: Renewable Energy Bills from the 80th (2019) Legislative Session

Bill	Primary Sponsor	Summary	Fiscal Note	Outcome
AB321	Assemblywoman Tolles	Submission of a tariff to the PUCN authorizing qualified contractors to design and install net metering line extensions. Requires lenders to factor in renewable cost savings when giving home loans.	None	Did not receive a hearing.
AB465	Assembly Committee on Growth and Infrastructure	Requires electric utilities to offer expanded solar access programs to residential customers; with participating low-income residential customers given a lower rate.	None	Approved by Governor Sisolak; Effective October 1, 2019.
SB167	Senator Brooks	Excludes individuals from regulation as a public utility; authorizes participation in net metering by a person who uses a renewable generation system meeting certain criteria.	None	Did not receive a hearing.
SB168	Senator Brooks	Authorizes exemption of buildings from existing energy efficiency/conservation standards; prohibits imposing unequal standards on renewable generating.	$13,034,033 (Governor's Office of Energy)	Died in Committee.
SB210	Senator Denis	Calls for the PUCN to establish provisions for community solar facilities; these facilities are exempt from regulations as public utilities.	$162,614 (PUCN)	Died in Committee.
SB217	Senator Hardy	Amends the PUCN portfolio standard to include renewable energy from a waterpower plant exceeding the prior 30 MW ceiling on eligibility.	None	Did not receive a hearing.
SB298	Senator Brooks	Requires greater transparency on employment data required for granting renewable generation projects partial tax abatements.	$948,356 (Governor's Office of Energy)	Approved by Governor Sisolak; Effective July 1, 2020.
SB358	Senator Brooks	Boosts Nevada's RPS to 50 percent by 2030; allows the PUCN to amend, update, and enforce state renewable portfolio standards on utility providers. Allows the commission to establish "just and reasonable" pricing for renewable power sold.	None	Approved by Governor Sisolak; Effective April 22, 2019.
SB420	Senator Ohrenschall	Exemption of individuals generating renewable energy for not more than 18 persons or premises that are not connected to the transmission or distribution grid of the electric utility from regulation as a public utility.	None	Died in Committee.
SB536	Senate Committee on Finance	Retools the prior Account for Renewable Energy, Energy Efficiency, and energy Conservation Loans to serve broader needs.	None	Approved by Governor Sisolak; Effective July 1, 2019.
SB547	Senator Brooks	Revises provisions concerning providers of new electric resources to match a more modern energy landscape.	None	Approved by Governor Sisolak, Effective June 12, 2019.

Source: Adapted from an analysis of the Nevada Electronic Legislative Information System (NELIS)

SB167, introduced by Senator Brooks, simplifies the net metering process by exempting individuals who produce and sell renewable energy to dwellings on the same property (such as a multi-unit apartment complex) from regulation as a public utility. The bill allows these same individuals to partake in net metering, but the legislation did not receive a hearing. No fiscal notes were placed against the bill, and many of the bill's provisions were reintroduced during the 2021 session via SB448 (2021).

Senator Brooks also introduced SB168, a bill that revises energy efficiency and conservation standards by allowing energy savings from on-site renewable generation to count towards the efficiency of a building if a renewable energy system on site provides the same conservation at a lower cost. Additionally, the bill prohibits the imposition of higher standards on renewable sites than those without renewable generation capabilities. The bill carried a fiscal note of $13,034,033 biennially as estimated by the Governor's Office of Energy and the legislation died in committee.

Senator Denis introduced SB210 which proposed that the PUCN establish provisions for community solar facilities. The estimated fiscal impact of the bill was $162,614 biennially according to the PUCN and the legislation died in committee.

SB298, introduced by Senator Brooks, requires greater employment data transparency in granting renewable generation projects partial tax abatements. The fiscal note placed against the bill by the Governor's Office of Energy estimated a biennial cost of $948,356 cost biennially. The bill was signed into law and became effective as of July 1, 2020.

Senator Brooks introduced SB358, setting Nevada's RPS at 50 percent renewable energy sold by 2030. The RPS rises through progressively stricter tiers until it reaches 50 percent in 2030. The tiers are: 22 percent in 2020, 24 percent in 2021, 29 percent in 2022 and 2023, 34 percent in 2024 through 2026, 42 percent in 2027 through 2029, and 50 percent in 2030 and each year thereafter. The bill also includes provisions for electric utilities to exclude renewable energy facilities from their rate base and instead charge a fair price for electricity generated; this was established at a competitive market price. The bill carried no fiscal note and was signed into law, effective April 22, 2019.

SB420, introduced by Senator Ohrenschall, is similar to SB167. This bill exempts individuals generating and selling renewable energy on a premises not connected to the electrical grid from regulation as a public utility. The bill carried no fiscal note and died in committee.

The Senate Committee on Finance introduced SB536, a bill that authorizes funding for the Account for Renewable Energy (ARE), and the use of Energy Efficiency and Energy Conservation loans for any other purposes for which the United States Department of Energy has approved. Legislators changed the name of the ARE to the Account for Renewable Energy, Energy Efficiency, and Energy Conservation. The bill carried no fiscal note and was signed into law, effective July 1, 2019.

SB547, introduced by Senator Brooks, revises provisions on new electric resources to match a more modern energy landscape in Nevada. Provisions include the exclusion of certain generation facilities and equipment used by data centers from regulation as a public utility, revises criteria to be eligible to purchase energy from a new electric resource, and revises criteria for a provider of new electric resources to be eligible to sell energy to customers. The bill carried no fiscal note and was signed into law, effective June 12, 2019.

Renewable Energy Legislation from the 81st Session (2021)

Nine bills addressing renewable energy policy and increased energy efficiency requirements were introduced during the 2021 session. Senator Chris Brooks (3), Assemblyman Howard Watts (D-Clark County) (1), Senator Joe Hardy (1), Senator James Ohrenschall (1), Senator Roberta Lange (D-Clark County) (1), Senator Keith Pickard (R-Clark County) (1), and the Senate Committee on Growth and Infrastructure (1) introduced legislation. Four of the nine bills became law.

AB383, introduced by Assemblyman Watts, proposed to increase efficiency standards on appliances and included provisions regarding greater regulations on appliance installation. Biennially, the Governor's Office of Energy estimates the cost of the bill to equal $506,560. The law went into effect on July 1, 2021.

Senator Hardy introduced SB197 a bill that requires a biennial report from the PUCN on renewable energy generation. The bill did not carry a fiscal note and failed to receive a hearing.

Senator Brooks introduced SB283. The legislation allows for municipalities to create special districts to fund improvement projects, including renewable energy infrastructure and programs to bolster energy efficiency. State agencies projected no costs in implementing the law. Governor Sisolak signed the bill, effective October 1, 2021.

SB303, introduced by Senator Brooks, requires licensing from the State Contractors' Board for solar panel installation. The bill addresses complaints from solar customers who had issues with service providers not fulfilling their obligations for adequate installation. Furthermore, the bill requires the Board to establish advertising regulations for installers. The bill did not carry a fiscal note and went into effect on October 1, 2021.

Senator Ohrenschall introduced SB324 that proposed to allow off-grid electrical generation for mobile home park residents. No fiscal note is attached, and the bill did not receive a hearing.

SB328, introduced by Senator Lange, proposed to establish licensing requirements for those who install electrochemical storage systems. These devices are needed to hold electrical energy in a chemical form for future use, as it allows energy storage beyond what a fuel cell or battery can hold.[9] The bill passed both chambers of the Legislature, but the Assembly and Senate approved different versions of the bill. The bill required a concurrent agreement by both houses to create one version of the bill to consolidate various amendments. However, no concurrent agreement passed before the Legislature adjourned, so the bill did not become law. There was no fiscal note placed against SB328.

Senator Pickard's SB351 sought to impose a wholesale charge on renewable energy sales that would be resold to the public. For example, under net metering, a residential solar customer who produces a net surplus of energy sends the energy surplus to their utility provider on the grid and receives a net metering rate (a percentage of the retail rate) in return. A utility provider later resells that energy to customers. The Department of Taxation estimated a biennial cost of $612,626 with passage and implementation of this bill, while the Governor's Office of Energy estimated a biennial cost of $186,130. The bill did not receive a hearing.

The Senate Committee on Growth and Infrastructure introduced SB382. This bill sought to increase the efficiency standards the PUCN can impose on utility providers. The legislation echoes SB150 (79th Session) and increases the minimum expenditures for energy efficiency improvement in low-income neighborhoods from 5 percent to 10

[9] See the UCLA Samueli School of Engineering "Electrochemical Energy Storage Systems," 2021 (http://www.seas.ucla.edu/~pilon/EES.html).

percent. Legislators ultimately placed this provision into SB448. No fiscal note was attached to the bill, and it died in committee.

Table 3: Renewable Energy Bills from the 81st (2021) Legislative Session

Bill	Primary Sponsor	Summary	Fiscal Note	Outcome
AB383	Assemblyman Watts	Increases efficiency standards for appliances; further regulation on appliance installation.	$506,560 (Governor's Office of Energy)	Approved by Governor Sisolak; effective as of July 1, 2021.
SB197	Senator Hardy	Requires a biennial report from the PUCN regarding generation for renewable energy sources.	None	Did not receive a hearing.
SB283	Senator Brooks	Allows municipalities to create special districts to finance local improvement projects, including renewable energy and efficiency investments.	None	Approved by Governor Sisolak; becomes effective October 1, 2021.
SB303	Senator Brooks	Requires licensing for solar panel installation contractors; requires State Contractors' Board to establish advertising regulations for installation providers.	None	Approved by Governor Sisolak; becomes effective October 1, 2021.
SB324	Senator Ohrenschall	Allows for an off-grid electrical generation station for mobile home park residents.	None	Did not receive a hearing.
SB328	Senator Lange	Establishes licensing requirements for contractors who install electrochemical storage systems.	None	Passed both chambers but the final version was not concurred; did not become law.
SB351	Senator Pickard	Imposes a wholesale charge on renewable energy sales on a local entity for resale to the public.	$612,626 (Department of Taxation); $186,130 (Governor's Office of Energy)	Did not receive a hearing.
SB382	Senate Committee on Growth and Infrastructure	Increases efficiency standards the PUCN can impose on utility providers; increases from 5 percent to 10 percent the minimum expenditure required for energy efficiency programs to be invested in low-income neighborhoods.	None	Died in Committee.
SB448	Senator Books	Omnibus clean energy bill; requires an 80 percent reduction in CO^2 emissions from 2005 levels by 2030; speeds up construction of the Greenlink Nevada Project; $100M investment in electric vehicle infrastructure by NV Energy; PUCN requires all utility providers to join a regional transmission organization by 2030; and includes solar tenant provisions.	$608,044 (PUCN); $568,112 (Governor's Office of Energy)	Approved by Governor Sisolak; certain sections of the bill become effective June 1, 2021; other sections will take years to go into effect.

Source: Adapted from an analysis of the Nevada Electronic Legislative Information System (NELIS)

SB448 also accelerates construction of the Greenlink Nevada Project. Currently only one service line connects Nevada's grid from Southern Nevada to Ely. The Greenlink energy infrastructure project seeks to build out a northern

transmission line from Ely to western Nevada, and another line from Southern Nevada to western Nevada (paralleling U.S. 95). The transmission line corridor offers potential for renewable energy production from biomass, geothermal, solar, and wind resources in the surrounding areas. Projects developed along the corridor would be attached to the grid. Current projections estimate work on the Greenlink Nevada Project will create around 4,000 jobs and generate $690M in economic activity.

Under SB448, the PUCN requires that every transmission provider must join a regional transmission organization by 2030. This requirement will allow Nevada to be a net exporter of renewable energy to neighboring states.

A major aspect of the bill is the electrification of automobile transportation in Nevada. The legislation requires NV Energy to invest $100M in electric vehicle infrastructure. Forty percent of these expenditures must go towards historically underserved communities and twenty percent must be invested in outdoor recreation and tourism programs. Investments include building charging stations, electrifying public transit and public fleets, and integrating this infrastructure into the grid.

The proposed requirements of SB382 (no less than 10 percent of expenditures for energy efficiency investments be in low-income neighborhoods) are included in SB448. Furthermore, the legislation clarifies that landlords who operate net-metering systems are not classified as a public utility (for example, if an apartment owner installs solar panels on all units within a complex).

Energy storage facilities and hybrid generation and storage facilities are added to the Renewable Energy Tax Abatement Program under SB448. This measure seeks to incentivize further investment in Nevada's renewable energy economy and production capabilities. Other measures regarding electricity production, such as reopening the Economic Development Electric Rate Rider Program and further regulatory updates, are included in SB448.

The PUCN estimates a $608,044 biennial cost in implementing SB448, while the Governor's Office of Energy estimates a $568,112 biennial cost. Governor Sisolak signed the bill into law, with certain sections of the bill going into effect at the end of the legislative session which ended on June 1, 2021, while other provisions will go into effect in coming years.