

iLamp Roadmap for The State of Nevada

This document covers information required to build a road map to commercial viability for the iLamp territorial license for the State of Nevada.



Nevada Population
3.178 Million

GDP
\$192.2 Billion

Nevada Transportation
Related Budget
>\$1 Billion

Street lighting is the single largest source of carbon emissions from local government, accounting for 30-60% of their total emissions.

Enhanced lighting leads to significant and sustained reductions in both night and daytime outdoor crimes with a benefit cost ratio of 5.1-10.8.

On residential roads 3.1% of accidents are fatal in lit conditions, rising to 4.9% in areas without street lights.

iLamp.com
ILOCX.com/iLamp



ConFlowPower.com
Batteryware.com
PowerasaService.com
Droneready.com
Investinbatteries.com
ILOcasestudy.com

Nevada, with a rapidly growing transportation budget, strong incentives for renewable energy, tax credits, and rebates, alongside significant funding from the Infrastructure Investment and Jobs Act, faces notable challenges such as rising crime rates that are concerningly above the national average and increasing worries about pedestrian and road user safety, with fatalities surpassing national norms. These circumstances present a unique and substantial opportunity within the state.

iLamp is not merely a streetlighting solution; it provides Nevada with a comprehensive array of strategies designed to unlock significant economic benefits, enhance public safety, reduce crime, and establish a robust technological platform that attracts American tech innovators and developers. This positions iLamp as a catalyst for spreading these solutions on a global scale.

Lamp Sales: iLamp's autonomous operation eases the burden on the power grid through innovative cylindrical solar panels, and its modular design allows for the integration of various sensors, hardware, and software solutions that enhance pedestrian and road user safety. This aligns with Nevada's goals to promote solar energy, bolster grid resilience, and reduce traffic fatalities. Its adaptable design also ensures seamless integration with local systems, making it an essential component of urban infrastructure.

Utilities: The Power as a Service (PaaS) model, where customers pay for the clean energy generated and used by the device, sets a new standard for existing utilities to embrace sustainable practices, beginning with iLamp. This approach opens the door for new utilities focused on local clean energy production, detailed billing, and dynamic on-device management, which is crucial in a state that is leading the way in renewable energy adoption.

Local Rights: iLamp's commitment to local manufacturing fosters job creation across multiple sectors, from production to maintenance. By tapping into Nevada's diverse talent pool and resources, it supports economic growth and regional prosperity. The potential for sub-licensing rights for specific regions or sectors further expands revenue generation opportunities, ensuring that the benefits of iLamp's technology remain within the state.



Creativity is the power to correct the seemingly unconnected.

- William Plomer

Required Streetlights

454,000

Nevada Road Fatalities

416 - 2023

Nevada tArea

286,367 Sq Mi

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Street lighting is the largest single source of carbon emissions from local governments, typically 30-60% of their total emissions.

On residential roads 3.1% of accidents are fatal in lit conditions, rising to 4.9% in areas without street lights.

In April 2019, the Nevada legislature passed a bill that requires 50% of electricity in the state to be generated from renewable resources by 2030.

Nevada is committed to reducing GHG emissions with the passage of SB 254 in 2019. Nevada adopted aggressive GHG emissions-reduction targets: 28% by 2025, 45% by 2030, and net-zero (near-zero) by 2050.

Nevada is primarily served by investor-owned utility: NV Energy, Headquartered in Las Vegas. Rural Nevada electricity is supplied by smaller district, county and city run utilities.

iLamp is more than just a product; it is a pathway to innovation, security, and economic progress. Addressing key issues like grid efficiency, renewable energy integration, and pedestrian safety, it embodies Nevada's forward-thinking vision for a safer and more sustainable urban environment.

iLamp's advanced street lighting solutions significantly enhance public safety by reducing crime, which in turn boosts property values in well-lit neighborhoods. The modular design of iLamp supports health improvements through environmental monitoring and hazard warnings, while also offering diverse revenue streams through sub-licensing, lamp sales, and Power as a Service. As part of the Conflow Power family, all licensees gain access to continuous growth and innovation opportunities.

This dynamic expansion offers the perfect environment for streetlights to be upgraded across the state with future-proof, innovative iLamps that can be integrated into new developments, parking lots, campuses, shopping centers, residential neighborhoods, pedestrian areas, parks and recreation grounds, sports venues, arenas, and business parks across Nevada.

Nevada's willingness to adopt cutting-edge, smart, and cost-effective solutions, coupled with the pressing need to address rising crime rates and road safety concerns, underscores the necessity of iLamp. By transforming neighborhood safety across its vast 110,577 square miles, iLamp can play a pivotal role in shaping Nevada into a secure, sustainable, and technologically advanced urban landscape.

The iLamp

What is iLamp?

iLamp is a groundbreaking, self powered, modular, and enhanced lighting solution designed to address multiple urban challenges. By integrating autonomous power generation capabilities, and monetizing them iLamp is easy to install anywhere and alleviates grid strain, contributing to energy sustainability. By using Power as a Service to bill for this energy, iLamp generates its own revenue. Its modular design supports a wide range of smart city applications, offering further monetization opportunities and revenue streams and making it a future proof solution for urban infrastructure.

Equipped with low profile, cylindrical solar panels, iLamp harnesses renewable energy, storing it in batteries for efficient distribution. This setup powers street lighting but also supports various smart sensors and modules, eliminating transmission costs and reducing emissions to zero.

Each iLamp is customizable to meet the needs of different neighborhoods—supporting add-ons like 5G WiFi, traffic management, CCTV, environmental sensors and a plethora of other modules, sensors and software. This modularity ensures a quick, plug-and-play setup, making it adaptable and future proof and providing licensee's with various upsells and benefits.

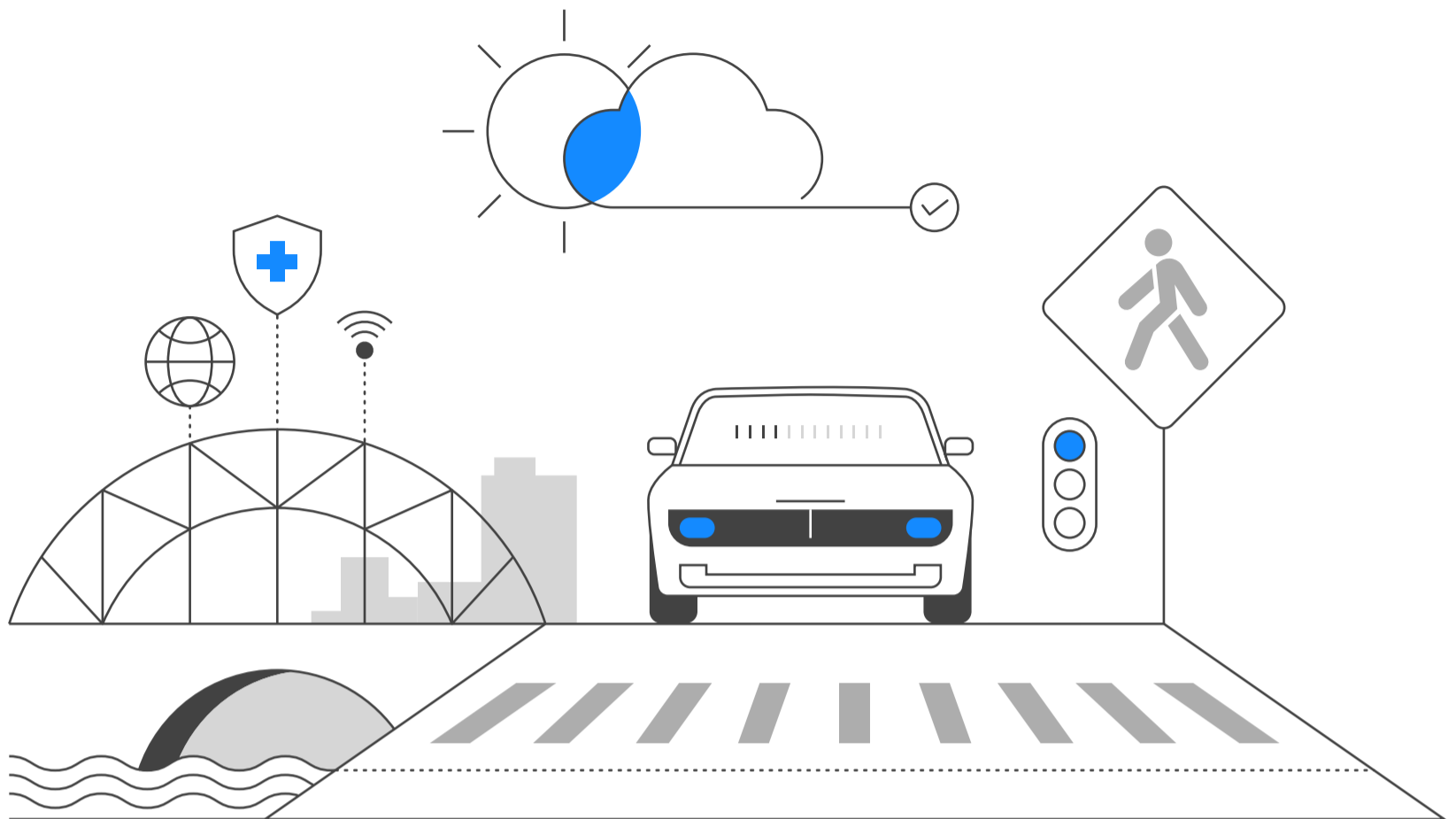
iLamp qualifies as enhanced street lighting, which has been shown to reduce crime by 20-40%. Implementing iLamp can therefore significantly reduce various crimes and improve public safety which improves quality of life and stimulates local economies.

Through its App and Module Stores, iLamp is a dynamic framework for unlocking hardware and software ingenuity, similar to how Google Play and Apple App Store revolutionised smartphones capabilities.

iLamp is not just a streetlight; it is a comprehensive urban solution and strategy designed to enhance safety, sustainability, and spur economic growth. By leveraging advanced technology and modular design, iLamp offers a future proof infrastructure that adapts to evolving needs, making countries, cities, towns and neighbourhoods around the globe safer, more attractive, and better connected.

Whether through crime reduction, safety, economic stimulation, or health and environment benefits, iLamp stands as a beacon of innovation in urban development, illuminating the future it unlocks.





The iLamp

Why iLamp?

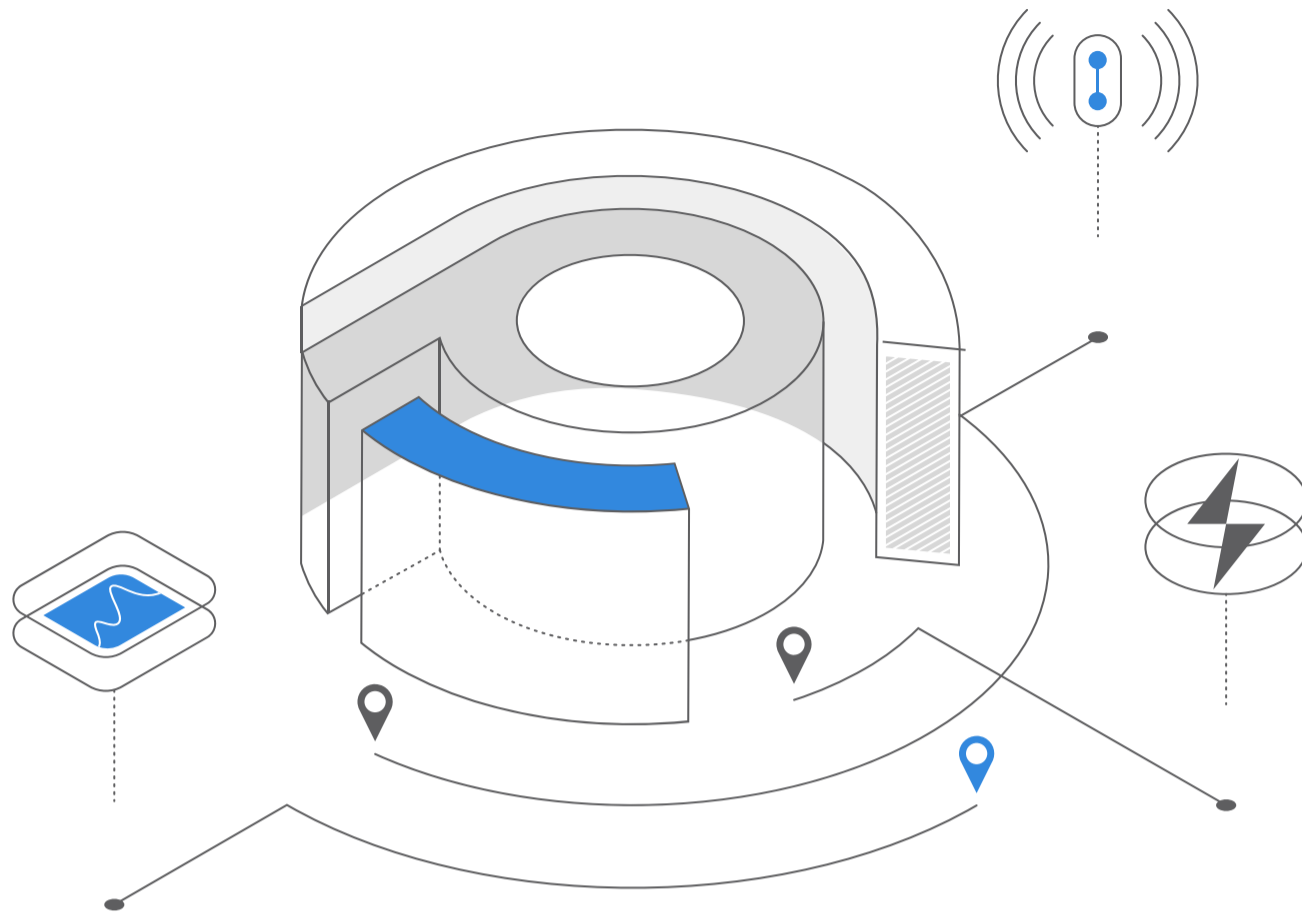
iLamp has a transformational effect on communities making them safer, more prosperous, social and desirable. It is the single most cost effective improvement any country, city, town or neighbourhood can make, offering multifaceted benefits that dramatically outweigh its costs.

Saves Lives: On both streets and the road. Pedestrian and driver fatalities are 58% more likely on unlit roads. By providing enhanced illumination iLamp protects both the community and road users.

Decreases Crime: iLamp improves visibility, studies have shown that this enhanced street lighting leads to sustained reductions in crime rates of over 40%. Implementing iLamp improves crime rates, deters potential crimes, creating safer, more welcoming public spaces that can be used after dark, encouraging outdoor activities, social interactions and commerce.

Increases Property Values: Street lighting correlates with increased property values - with each 1% reduction in crime leading to an approximate 0.5% to 1% increase in property values.

Creates Jobs: iLamp sublicensing creates and inspires local jobs that keep money within the communities they serve, creating a virtuous cycle. Sublicensing can be made available down to a neighbourhood or zip code level.



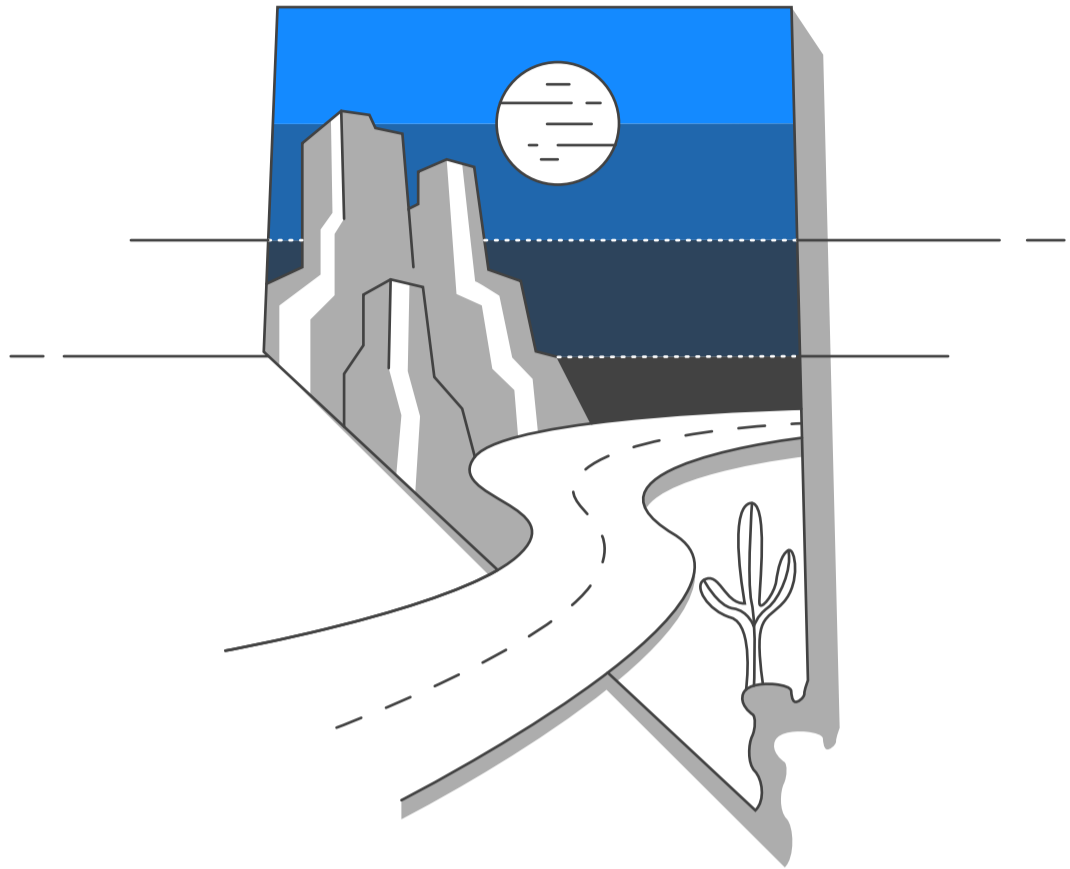
The Power of Conflow

Flagship Product of a Global Technology Aggregator

iLamp is the flagship product of the Conflow Power Group, a company with extensive global manufacturing capabilities, years of experience in product development, electronics, technology aggregation and strategy. Conflow Power Group focuses IoT and smart city solutions, owning several key technologies that make iLamp possible, ranging from advanced electronic modules and power management systems to battery monitoring, automatic lighting, LED technologies and software.

Conflow Power Group collaborates with several external developers to adapt their technologies for iLamp, providing a comprehensive development kit and specifications to support these innovations. This collaboration has led to a robust, established ecosystem surrounding every key aspect of streetlighting. Additionally, iLamp integrates a variety of smart city applications, making it the most comprehensive streetlighting solution available.

The company is committed to future innovation, with several new products in development, continually enhancing the capabilities and applications of iLamp. This ensures that iLamp remains at the forefront of smart city technology, offering unmatched performance and versatility in lighting solutions. iLamp is not only a product, but a strategy that has spawned an entire ecosystem of revenue generating activity for license holders to participate in.



The Nevada Opportunity

In April 2019, the Nevada legislature passed a bill that requires 50% of electricity in the state to be generated from renewable resources by 2030.

Nevada is committed to reducing GHG emissions with the passage of SB 254 in 2019. Nevada adopted aggressive GHG emissions-reduction targets: 28% by 2025, 45% by 2030, and net-zero (near-zero) by 2050. These targets are in line with neighboring states in the region and are an important step toward managing climate change. Under current policies and based on the best available science, Nevada is currently on a path to reduce economy-wide GHG emissions 24% by 2025 (4% short of the 28% goal) and 26% by 2030 (19% short of the 45% goal), thus missing the 'emissions-reduction goals. Consequently, new mitigation-focused policies, programs, investments, and regulations are needed to put the state on the path toward realizing net-zero GHG emissions by 2050.

1. Nevada is primarily served by investor-owned utility: NV Energy, Headquartered in Las Vegas. Rural Nevada electricity is supplied by smaller district, county and city run utilities.
2. All potential partners can be found here. There are multiple, and some are state-owned www.publicpower.org/public-power-nevada

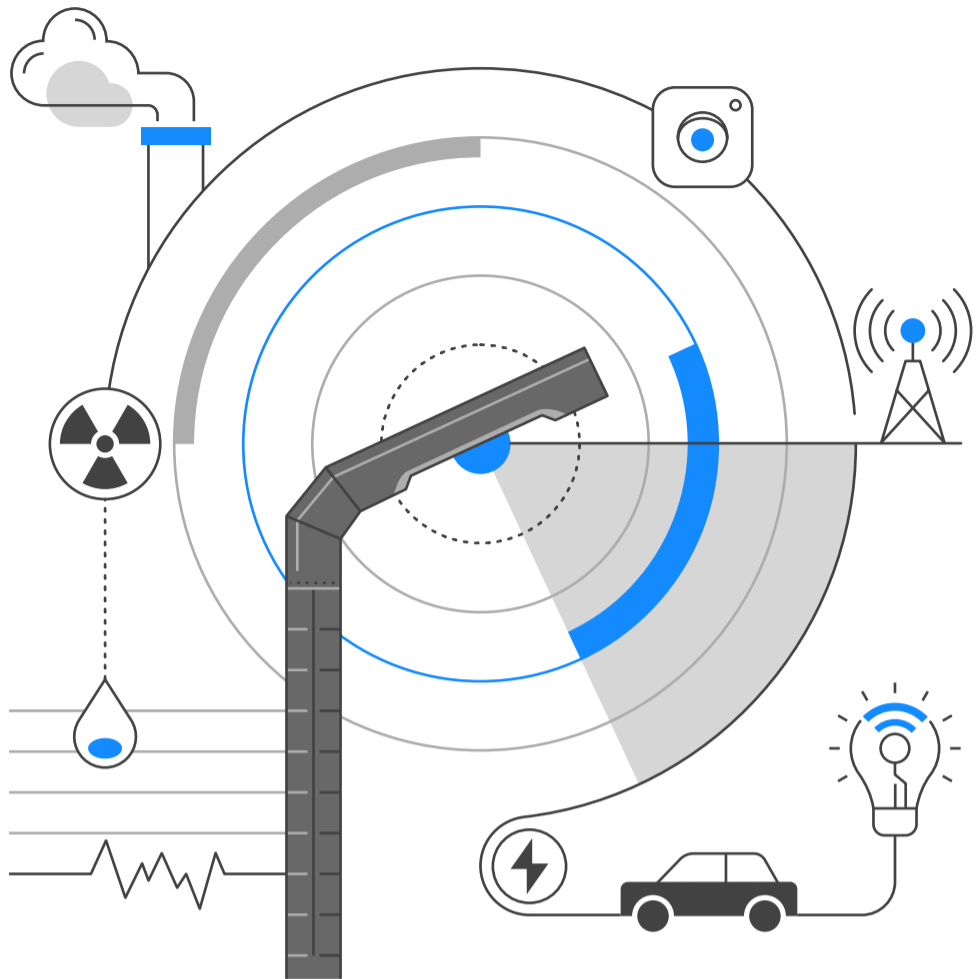
Distributed Energy Resources

On October 8, 2018, the Public Utilities Commission (PUC) of Nevada approved an Order requiring Nevada’s public electric utility, NV Energy, to incorporate Distributed Energy Resources (DERs), such as solar and energy storage, into its three-year system plan. The Order, in meeting the requirements of Senate Bill 146, requires NV Energy to submit a Distributed Resources Plan (DRP) as part of its triennial integrated resource plan.

This Order puts Nevada alongside leading states, such as California, Hawaii, and New York, in requiring that utilities take DERs into consideration as part of their system planning processes. This is a notable commitment to DER integration in a state that has been widely publicized for its contentious removal of net metering without a grandfathering clause for existing solar customers. Through the required distribution planning forecasts and analyses and by requiring integration with the resources plan, Nevada has elevated the role of DERs to meet grid needs. As the DRPs are developed and reviewed in Nevada, we’ll have another approach to look to—in addition to the in-flight proceedings in California, New York, and Hawaii—in determining the best way to plan for DERs.

The IRA also includes several provisions related to energy equity, including \$3 billion to the Environmental Protection Agency (EPA) for grants for community-led projects in disadvantaged communities and \$27 billion for non-profit, state, and local climate finance institutions supporting the deployment of low- and zero-emission technologies. In support of rural communities, the bill includes a \$1 billion appropriation to the U.S. Department of Agriculture (USDA) for loans to finance renewable energy projects, \$1 billion for USDA’s Rural Energy for America Programs, and \$9.7 billion to USDA to finance rural electric cooperatives’ purchases of renewable energy.

Shared Renewables – Due to building and property attributes and ownership issues, many customers are unable to install renewable energy technologies where they live or work. Allowing shared, or community, renewable energy projects addresses these barriers. These projects have multiple owners or subscribers who pay for a portion of the project or the generation provided by the system. Virtual net metering allows a customer to receive credits from a shared system as if the generation were on site. Virtual net metering is different from a power purchase agreement (PPA), which pays the customer for the proportion of power they produce. Because it is treated as a credit on the customer’s bill, the customer can avoid the tax implications of a PPA payment - which can adversely affect the economics of the system (and may come as a surprise to the participant).



Public security and health



Road Safety & Traffic

iLamp improves road safety, decreasing road fatalities of both road users and pedestrians. iLamp's optimal lighting enhances safety during peak low light hours and adverse weather conditions. Modular camera and communications systems can help monitor traffic, detect potential hazards, and improve response times to accidents, improving road safety and reducing traffic.



Pedestrian Safety & Crime Deterrence

iLamp deters crime and increases pedestrian visibility by providing lighting in areas such as sidewalks, crosswalks, and public transportation stops. Modular cameras can be used to monitor pedestrian movement and help identify potential hazards or security threats in real time ensuring safer pedestrian environments.



Weather Monitoring Module

Weather sensors can detect changing weather conditions, such as storms, fog, rain, or snow, and adjust the intensity and distribution of light accordingly. This adaptability enhances visibility for drivers and pedestrians in adverse weather conditions, further improving public safety.

 **Air Quality**

Air quality monitoring can help track pollution levels in real time, allowing authorities to implement appropriate measures to limit exposure and maintain a healthy environment. By monitoring and addressing air quality concerns, iLamp contributes to improved broader public health and well being.

 **Communications**

Communication modules can both expand telecoms coverage and facilitate the transmission of critical information to the relevant authorities and emergency services in case of accidents or security incidents. creating a comprehensive and interconnected network enabling authorities to monitor and manage various aspects of urban living more effectively. This network of sensors can lead to improved decision making, more efficient use of resources, and a better understanding of the

 **Light Pollution Reduction**

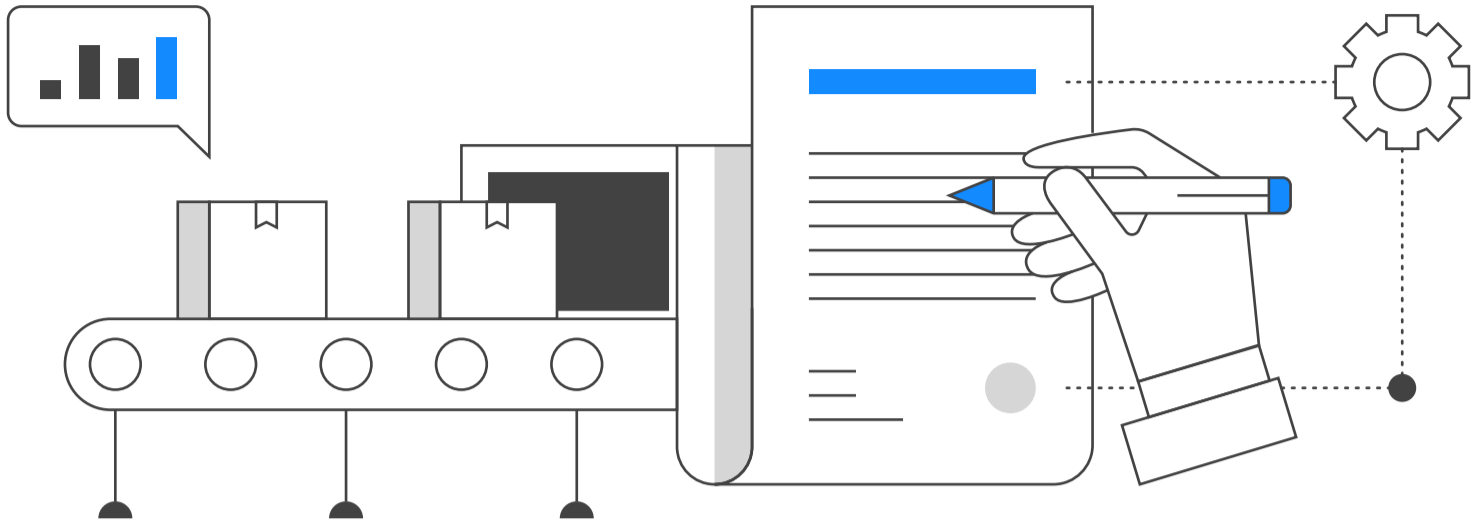
The adaptive lighting capabilities of iLamp can minimize light pollution by adjusting brightness levels according to the time of day and surrounding conditions. This can contribute to a better night-time environment, reducing the impact of artificial light on wildlife and human health.

 **Integration with Existing Infrastructure**

iLamp technology can integrate with existing sensors and infrastructure, allowing for enhanced data collection and analysis. By connecting iLamp with sensors a modules facilitating parking, traffic management, telecommunications structural, UV and noise monitoring, fire, leak and flood detection, grid management and many more.

 **Public Protection**

iLamp can host smoke, gas, gunshot detection, thermal imagine and communications modules, enabling the quick detection of public safety hazards, such as wildfires, shootings, gas leaks or explosions, these can then be relayed in real time via the communication module to the relevant authorities, enabling faster, more targetted and data driven responses.



License holder benefits

1. First Refusal on Conflow Power Group Innovations:

Territorial holders will be at the forefront of any technological advancements or innovations developed by the Conflow Power Group. This means that before any new feature, product, or service is rolled out to the broader market, territorial holders have the exclusive opportunity to adopt, integrate, or decline them. This not only provides an edge over potential competitors but also ensures that each territory is equipped with the latest in energy and infrastructure solutions.

2. Local Manufacturing Capabilities:

One of the standout privileges for territorial holders is the ability to establish local manufacturing units. This initiative not only contributes to local economic growth but also ensures quicker response times for installations, maintenance, and replacements. With local manufacturing, territorial holders can control the quality, reduce delivery times, and tailor-make solutions suitable for their region's specific needs.

3. Comprehensive Rights Granted

Rights to manufacture, distribute, market, sell. iLamp. Rights to operate the iLamp App and Module stores. Rights to operate PaaS contracts. Rights to a supply line for a guaranteed number of lamps.

Competitive Edge Against iLamp HQ:

By establishing local manufacturing, territorial holders, depending on local market conditions, may be able to produce iLamps at competitive prices, thereby posing healthy competition to iLamp HQ via the allowed sale of

these lamps to other territories. This encourages market dynamics that can lead to additional revenue streams, as well as continuous improvements in the product, better pricing strategies, and an overall enhanced offering for end customers.

4. Access to Wider Network of Territorial Rights Holders:

Being a territorial rights holder means more than managing a region; it's an entry point into a global network of iLamp territories. This worldwide community unlocks avenues for collaborative projects and joint ventures but also creates a global marketplace where territories can showcase their own modules, technologies and solutions.

5. Distributing Locally Developed Technologies:

Territorial holders aren't restricted to what iLamp or Conflow offers. They can innovate, create, or license their own technologies for integration into the local iLamps. Once developed, they can distribute these innovations to other territorial holders both nationally and internationally. This not only diversifies their revenue stream but also places them in a position of influence within the iLamp community.

6. Charging Margins on Distributed Technologies:

When distributing their locally developed or licensed technologies to other territories, holders can charge a margin on those solutions. This is a direct revenue generation model that rewards innovation and the entrepreneurial spirit of the territorial holder.

7. Early Mover Advantage:

Territories that adopt iLamp's solutions early will naturally have a head start. As pioneers they gain first hand experience, establish best practices, and develop a robust infrastructure that later entrants will look to emulate. This experience positions them strongly not just as market leaders in their territories but also as potential consultants or partners for newer entrants.

8. Preferential Rates on Modules and Software Solutions:

One of the defining advantages for territorial holders is access to preferen-

tial rates on various modules and software solutions. iLamp HQ, recognizing the strategic importance of territories and their contribution to the global ecosystem, extends these rates as a token of partnership and collaboration.

When iLamp HQ or any other territory negotiates with third-party vendors or develops in-house solutions, the benefits of bulk purchasing or shared development costs are passed on to the territorial holders. This means lower acquisition costs, which can be a substantial financial benefit.

9. Collective Bargaining Power:

The collective might of all the territorial holders allows them to exert a greater influence when negotiating rates or features with software and module providers. This collaboration ensures that all territories, irrespective of their individual size or bargaining power, get to leverage the combined strength of the entire iLamp community.

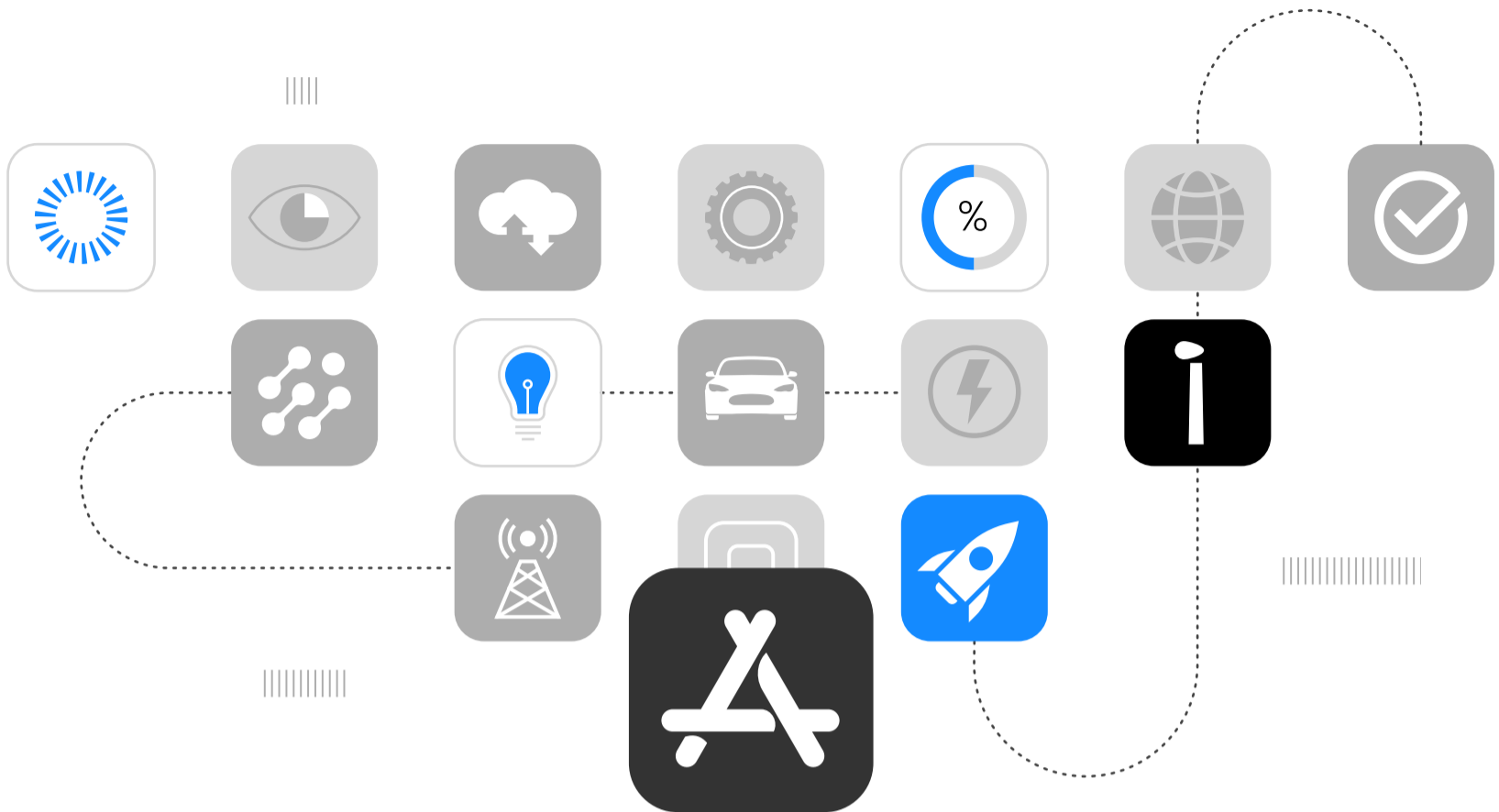
10. Access to a Repository of Solutions:

Territorial holders will have access to a vast repository of modules and software solutions developed or sourced by iLamp HQ and other territories. This curated collection ensures that territories do not have to start from scratch or waste resources in reinventing the wheel. They can simply choose from tried and tested solutions, making the deployment faster and more efficient.

11. Continuous Updates and Upgrades:

Technology is ever-evolving, and in the world of smart urban solutions, staying updated is crucial. Territorial holders will continuously receive updates and upgrades on the modules and software solutions from both iLamp HQ and other territories. This ensures that the iLamp infrastructure in each territory remains modern, efficient, and in line with the latest technological advancements.

Territorial holders of iLamp are in a prime position to not just capitalize on the opportunities provided by Conflow Power Group but also to shape the future direction of energy solutions in their region. Their benefits extend beyond revenue generation to establishing a stronghold in the ever-evolving



iLamp App Store for Urban Innovation

iLamp stands at the forefront of urban technological evolution, akin to how the Google Play and Apple App Store redefined the landscape of software applications. iLamp transcends its primary function, unfolding as a dynamic framework for both hardware and software ingenuity.

Innovative Solutions

In the iLamp ecosystem combinations of hardware and software create transformative solutions for urban challenges. For instance, integrated microphones in iLamps enable a software application for gunshot detection and triangulation, providing precise location data for rapid law enforcement response, enhancing public safety. Similarly, iLamps equipped with smoke and heat sensors can detect early signs of forest fires, allowing for prompt alerts to residents and emergency crews, significantly mitigating fire damage and safeguarding communities. Motion sensors and cameras on iLamps optimise traffic flow through AI-driven analysis of traffic patterns, reducing congestion and accident risks, and contributing to a more environmentally friendly urban environment. These examples exemplify iLamp's potential in revolutionising urban living through smart, integrated technology solutions.

Empowering Local Innovation, Impacting Globally

While iLamp's immediate influence is local, enhancing public spaces with smart lighting, its potential for global technology dissemination is significant. This model encourages local developers to contribute to a growing repository of modular solutions, potentially setting new standards in urban technology and smart city development.

Creating a Sustainable Ecosystem

The beauty of the iLamp model lies in its economic and collaborative structure. Territorial holders stand to gain considerably, capturing over 20% of the revenue from apps developed in their region, incentivising territorial holders to promote innovation within their locale but also allowing them to include these novel solutions in their sales pitches, thereby broadening their offer to clients. This creates a symbiotic ecosystem where territorial holders, developers, and end-users benefit mutually.



Intelligent Lighting

iLamp's intelligent lighting app ensures the correct lighting level for the area it's positioned in, adapting to visibility and weather.



Power As A Service

PaaS redefines how energy is generated, distributed, and monetized on each iLamp.



Communications Billing

Communications billing enables each module to pay only for the data it uses, as well as for open WiFi network billing.



Batteryware Monitoring And Optimisation

BatteryWare conducts comprehensive monitoring, and real-time analysis to ensure optimal battery conditions.



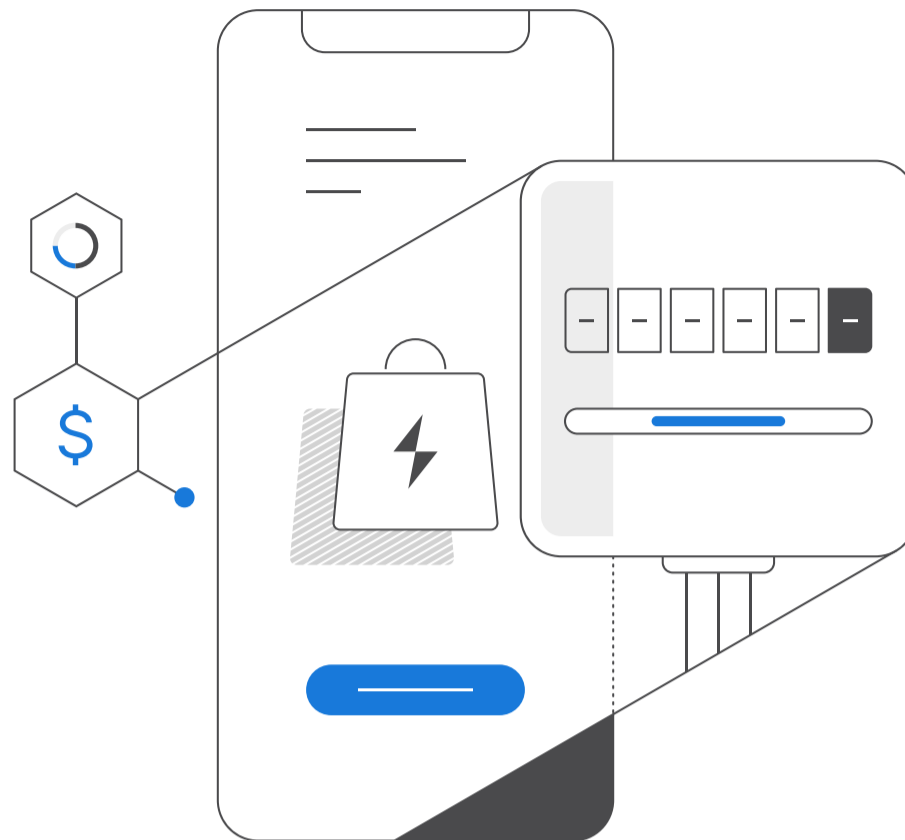
Video Surveillance

Video surveillance enables remote real time monitoring, motion detection, high definition video, smart alerts and integrations.



Weather Monitoring

Weather monitoring uses environmental sensors to act as a local weather station, relaying real time data to stakeholders.

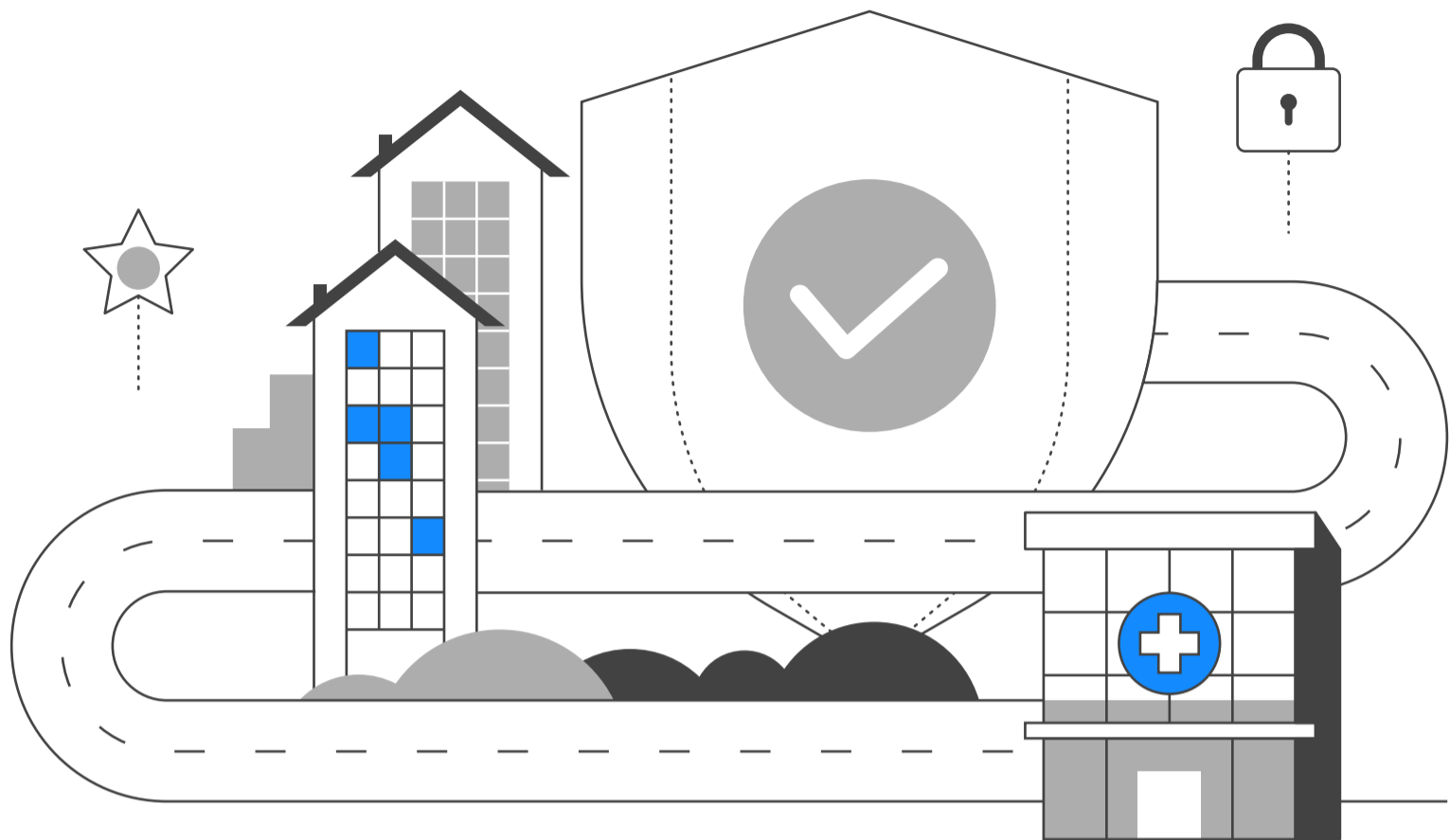


Power as a Service

Power as a Service (PaaS) is a payment processor connected to an energy management and distribution solution which was designed from the ground up to manage clean kilowatt hours (kWh) of locally produced and consumed power. PaaS enables the generation, metering, and monetization of this localised power on a decentralized basis between varied stakeholders.

Each iLamp unit is equipped with solar panels that harness renewable energy, storing it in batteries for efficient distribution. This setup not only powers the streetlighting but also supports a variety of smart sensors and modules. These modules may include cameras, environmental sensors, weather stations, and telecommunications devices which all use power, and all may have separate billing accounts with PaaS. By metering energy generated and consumed by each device PaaS enables a new paradigm where power can be locally generated for local consumption, eliminating transmission costs and emissions to near zero.

Under the PaaS model, the iLamp licensee can create PaaS contracts that delineates roles for both power suppliers and power users. Much like traditional utility models, these contracts enable accurate billing based on actual energy consumption, this is a significant step towards redefining how energy is generated, distributed, and monetized in the modern era and a crucial extra revenue stream which can be explored by iLamp licensees.



Enhanced Street Lighting

Nevada's high crime rate makes it crucial to implement effective crime prevention strategies.

Studies have shown that improved/enhanced street lighting reduces crime by 20-40%, making enhanced lighting the single most effective way to lower crime while also increasing pedestrian and road safety.

Specific studies indicate:

UK Home Office: 20% reduction in crime, including vehicle-related crimes.

U.S. Study: Published in *Criminology & Public Policy* showed 45% reduction in nighttime index crime and a 39% reduction in daytime index crimes following enhanced lighting installation.

Enhanced street lighting could lead to a significant reduction in crime rates, potentially by 20-30%. This includes reductions in various types of crimes such as vehicle theft, property crimes, and violent crimes.

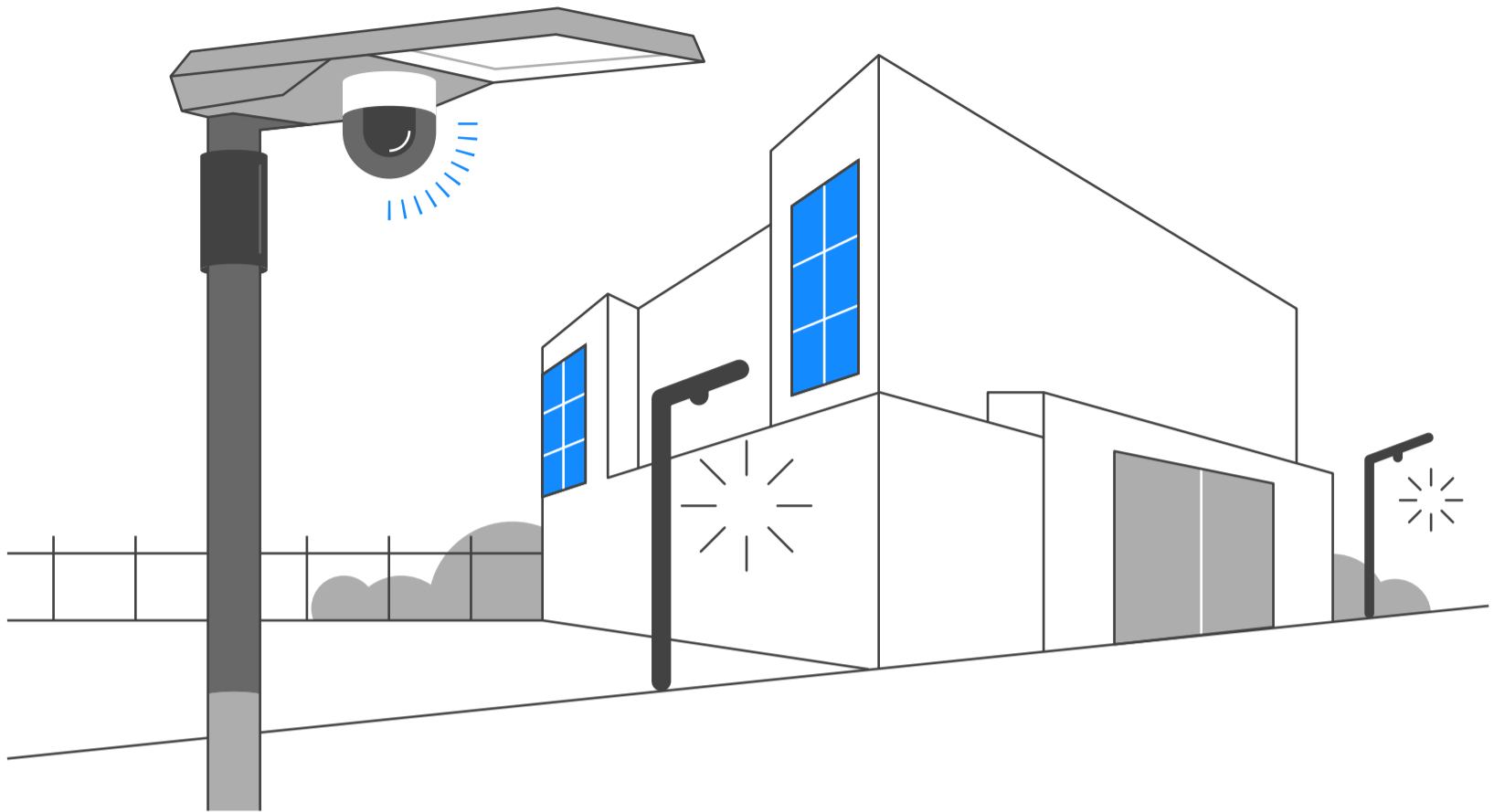
A 1% reduction in overall crime can lead to a 0.5% to 1% increase in property values. A 10% reduction in crime can result in a substantial increase in property values, potentially up to 8%.

Enhanced lighting could increase property values significantly in previously unlit or poorly lit areas and can further lead to economic stability and growth by attracting businesses and improving the quality of life. The increase in property values and improved safety drive more investments in the local infrastructure and services.

Better lit streets can improve the perception of safety, leading to increased outdoor activities and community engagement. Improved lighting can also enhance the effectiveness of other crime prevention measures, such as CCTV surveillance.

To support the implementation of enhanced street lighting, a comprehensive database containing data on crime rates and property values has been compiled. This helps in identifying high-crime areas that would benefit most from enhanced lighting, evaluating the cost-effectiveness and impact of enhanced lighting projects and monitoring the long-term effects on crime rates and property values.

Enhanced street lighting presents a promising strategy for Nevada to improve public safety, reduce crime, and boost property values. Given the continent's rapid growth and active real estate market, investing in such infrastructure yields substantial benefits, making neighborhoods safer and more attractive to residents and businesses.



The iLamp Effect

Imagine a neighbourhood with above average crime, where after dark the streets feel unsafe and are inadequately lit.

People avoid the area, the perceived danger deters people from frequenting local businesses, which in turn close earlier or shutter permanently. The neighborhood loses its vibrancy and appeal, leading to declining property values and further disinvestment. People leave for brighter pastures.

Now imagine iLamp's are installed, their enhanced lighting and cameras begin to deter crime, first due to the lighting, monitoring, and then due to the larger presence of people who now feel safe walking the streets.

This reduction in crime leads to a domino effect: as people feel safer, they are more likely to walk around, visit local businesses, and participate in community activities. This increased presence of people further deters criminal behavior, creating a safer and more welcoming environment.

Better street lighting also contributes to road safety. Well lit streets significantly reduce the likelihood of traffic accidents and pedestrian casualties. Emergency services, including police, firefighters, and medical personnel,

benefit from improved visibility, allowing them to navigate the area more efficiently and locate incidents quickly. This enhanced response capability saves lives and mitigate the severity of emergencies.

As safety improves, the community begins to experience a revival. People start to move into the area, attracted by the now safer and more appealing environment. This influx of residents drives up property values and stimulates the local economy. Businesses extend their operating hours, taking advantage of the increased foot traffic and nighttime activity. Public transportation becomes more accessible and reliable, allowing residents to shop, socialize, and commute safely after dark. This increased mobility to a higher quality of life and a more vibrant community atmosphere.

iLamp is not only functional, but aesthetically pleasing. They can be positioned to highlight architectural features and are designed to minimize light pollution, creating a pleasant nighttime atmosphere.

iLamp modules make each lamp future proof, and can tailored to the community's needs. For instance, environmental sensors can help allergy sufferers by providing real-time air quality data. Other modules can offer early warnings for forest fires, gas leaks, and weather events, enhancing overall safety and preparedness.

This story is backed by the hard evidence of communities around the world that have undergone this transformation:

The Impact of Street Lighting on Crime, Fear, and Pedestrian Street Use - by Kate Painter - Institute of Criminology, University of Cambridge, UK

https://popcenter.asu.edu/sites/default/files/137-painter-the_impact_of_street_lighting_on_crime_fear_an.pdf

College of Policing - Improved Street Lighting <https://www.college.police.uk/research/crime-reduction-toolkit/street-lighting>

Can deterrence persist? Long-term evidence from a randomized experiment in street lighting - Criminology and Public Policy



iLamp Sales, Installs, and Maintenance

iLamp sales represent the largest revenue producing activity for licensees, providing them with a lucrative opportunity in the rapidly growing smart lighting market. To support sales efforts, iLamp offers comprehensive resources including sales proposals, branding kits, detailed product information, and benefit training resources. Additionally, licensees receive guides on available grants and best practices for approaching towns, counties, and municipalities, ensuring they are well-prepared to begin sales activities immediately.

iLamp products can be sold to a diverse range of public and private entities. Potential clients include public streets and highways, educational campuses, parks and recreational areas, parking lots, hotels and resorts, industrial estates and factories, hospitals and healthcare facilities, residential developments, train stations and railway networks, airports and ports, shopping complexes and malls, small businesses, stadiums and arenas, pathways and cycleways, homeowners associations and many more.

This broad market base provides licensees with extensive opportunities to secure contracts and drive significant sales revenue.

iLamp has been engineered for ease of installation, requiring minimal manpower and equipment. This user-friendly design allows sales agents to offer efficient and cost-effective installation services. Installation guides and cost calculators are readily available from iLamp, ensuring that licensees can accurately estimate installation costs and streamline the installation process.

Sales agents have the flexibility to either control the installation process themselves or sublicense these services. By sublicensing, they can generate additional revenue through the sale of installation rights or by charging royalties on services rendered. This approach enables licensees to maximize their revenue potential and capitalize on every aspect of the sales and installation process.

Maintenance of iLamp systems is another key revenue stream for licensees. Similar to installation, maintenance services can be controlled directly by the licensee or sublicensed. Charging royalties on maintenance contracts provides a continuous revenue source, akin to receiving a commission on each contract. This ensures that licensees benefit not only from the initial sale but also from ongoing service agreements.

The combined revenue from sales, installation, and maintenance of iLamps is substantial. With a wholesale cost of \$5000 and a sale price of \$9000 per unit, a small installation project of 35 units can generate over \$300,000 in sales revenue alone. This significant profit margin underscores the financial viability and attractiveness of iLamp's business model for licensees.

iLamp's direct sales, installation, and maintenance services offer a robust business opportunity for licensees. By leveraging the comprehensive resources and support provided by iLamp, licensees can effectively penetrate the market, secure diverse contracts, and achieve substantial revenue growth.

Sublicensing Opportunity

Sublicensing is a powerful tool for iLamp Nevada, enabling the immediate commencement of operations across the expansive state. This approach allows territorial holders to rapidly extend the iLamp business model to subterritories, fostering swift expansion and the potential for quick sales. The capacity for immediate sublicensing is critical in securing essential early-stage revenue, providing financial stability right from the start.

Territorial holders in Nevada have the unique advantage of recruiting a team of local experts who bring an intrinsic understanding of the state's diverse and dynamic landscape. These individuals, empowered with the independence that sublicensing offers, can operate with significant autonomy. This autonomy encourages growth and innovation without the need for continuous oversight, fostering a dynamic team environment that is agile and acutely attuned to the specific needs of the Nevada market.

By capitalizing on local expertise, iLamp Nevada can engage with local professionals such as manufacturers, businesspeople, and regional specialists who have a deep understanding of their specific areas within the state. Sublicensing to these local experts ensures that iLamp's solutions are finely tailored to meet Nevada's unique challenges and opportunities, thereby building trust and credibility within local communities.

Sublicensees in Nevada are adept at navigating the state's bureaucracy, regulations, policies, and understanding cultural nuances and market dynamics. This proficiency leads to more effective market penetration while spreading operational risks among a broader base of stakeholders, lessening the financial and operational load on the primary license holder. This approach fosters local stakeholder engagement, creating a sense of ownership and commitment to iLamp's success, potentially leading to stronger advocacy and brand loyalty across Nevada.

The sublicensing model is inherently scalable, enabling iLamp Nevada to expand its reach across the state without the proportional increase in capital investment and resources typically required for such growth. The following price list provides an estimate of market prices as determined by leading financial institutions, tailored for the Nevada market.



SUBLICENSING OPPORTUNITY

State	Population	Street Lights	Street Lights	Territory Price
Boulder City	14,885	1,295	113	\$37,212.50
Caliente	990	86	7	\$2,475.00
Carlin	2,050	178	16	\$5,125.00
Carson City	58,639	5,102	444	\$146,597.50
Elko	20,564	1,789	156	\$51,410.00
Ely	3,924	341	30	\$9,810.00
Fallon	9,327	811	71	\$23,317.50
Fernley	22,895	1,992	173	\$57,237.50
Henderson	317,610	27,632	2,404	\$794,025.00
Las Vegas	641,903	55,846	4,859	\$1,604,757.50
Lovelock	1,805	157	14	\$4,512.50
Mesquite	20,471	1,781	155	\$51,177.50
North Las Vegas	262,527	22,840	1,987	\$656,317.50
Reno	264,165	22,982	1,999	\$660,412.50
Sparks	108,445	9,435	821	\$271,112.50
Wells	1,237	108	9	\$3,092.50
West Wendover	4,512	393	34	\$11,280.00
Winnemucca	8,431	733	64	\$21,077.50
Yerington	3,121	272	24	\$7,802.50
Total				\$4,418,752.50

The Market & Financials

Nevada, with its unique blend of cultural heritage and rapid technological advancement, presents a dynamic market for infrastructure innovation. The state's commitment to modernization and sustainable urban planning provides an ideal environment for advanced infrastructure solutions like iLamp. The diversity of Nevada, from its vibrant urban centers to its expansive rural landscapes, offers varied opportunities for street lighting solutions.

Market Segmentation

By Area	: Urban (Las Vegas, Reno, Henderson) Rural (Northern Nevada, Great Basin regions)
By Need	: Updating outdated infrastructure vs. New installations in developing urban districts
By Application	: Public streets, highways, recreational areas, private complexes, and carparks

Digital Cities : With major cities like Las Vegas and Reno leading in smart city development, Nevada presents substantial opportunities for iLamp to integrate with and enhance these initiatives.

Green Initiatives : Nevada's commitment to green initiatives and wide availability of grants, incentives and rebates aligns perfectly with iLamp

Decentralized Systems : As Nevada continues to struggle with blackouts and seeks to enhance its energy infrastructure, systems like iLamp that reduce the load on the grid are particularly advantageous.

Total Addressable Market (TAM):

The total number of public streetlights required in Nevada is estimated at 276,486 using the Northeast Energy Efficiency Partnerships formula.

Serviceable Available Market (SAM):

Given Nevada's diverse infrastructure needs and its openness to innovative technologies, targeting 8.7% of the TAM.

iLamp Nevada and the paradigm shift

iLamp is charting a groundbreaking path for Nevada, with a vision that goes beyond simply entering the market to fundamentally reshaping it. A critical decision lies in determining how to allocate operational control within iLamp Nevada versus the distribution of sublicenses. Direct management could lead to substantial profits and greater control over profit margins. However, partnering with skilled local entities could accelerate market penetration, leading to faster revenue growth and providing an immediate influx of revenue.

Additional income opportunities arise by leveraging Nevada-born hardware and software innovations, creating a comprehensive ecosystem of solutions. Through iLamp's extensive distribution network and app store, these innovations can reach new markets, each generating lucrative new revenue streams for iLamp Nevada.

Our venture's scope extends far beyond the product itself. There are numerous untapped local ventures in Nevada, with many more opportunities available. Establishing local production could position iLamp Nevada as a key supplier in the region. By monetizing the real estate of lamp poles and exploring various hardware and software combinations, along with subscription services like Power As A Service, the potential for income is both diverse and significant.

Backed by the Conflow Power Group, iLamp Nevada benefits from early access to and priority on all technological advancements and innovations from CPG, granting it a formidable edge as a leading pioneer in the state.

The partnership with the ILOCX platform further empowers iLamp Nevada in managing sublicense sales as effectively as territorial license sales. This provides an invaluable mechanism for sublicensees to generate capital within their own markets, fostering progress and market expansion.

The global urban landscape is on the verge of a profound transformation, and our innovative solutions are not just in demand; they are essential. As cities evolve, iLamp's cutting-edge solutions illuminate the way forward. iLamp Nevada is poised to be a central force in this pivotal shift, embodying progress and innovation.

Street Lighting Northern Nevada

A full state brief can be found here - https://cnee.colostate.edu/wp-content/uploads/2022/10/State-Brief_NV_September_2022.pdf

NV Energy offers street lighting service that applies to roadway lighting installations (excluding highway and area lighting such as parking lots and other general facility lighting). Based on their customers needs, you can decide to own or you may have NV Energy own the streetlight facilities.

- **Customer-owned Streetlights**

(Installation on NV Energy's distribution system)

- Open to all customers
- Customer provides the lights
- Operated and maintained by the customer
- Monthly billing
- Metered service (customer billed for actual usage)
- Unlimited streetlight options within jurisdiction requirements

- **NV Energy-owned Streetlights**

- Service open to qualifying customers that may include municipalities, contractors, developers, and some homeowner associations. Check with your local NV Energy Planning Representative for more details
- All fixtures include cut-off optics supporting the Dark Skies initiative
- Installation by NV Energy
- Monthly billing
- Unmetered service (customer billed at flat rates defined in tariff)
- Selection limited to NV Energy's standard lighting options

Las Vegas pilots smart lighting solutions

As part of a six-month pilot, AT&T will replace existing photocells with small cell streetlight routers. This will create a smart lighting network in selected locations on Main Street, Las Vegas Boulevard, near the University Medical Center and in residential areas.

AT&T will integrate their highly secure wireless LTE and LTE-M networks with smart lighting platforms to improve lighting conditions based on schedules and traffic.

In near real-time, the platform can monitor energy usage and outages to improve streetlight maintenance. This will help reduce public safety concerns with prolonged or unreported light outages in areas of the community frequented by citizens and tourists.

 **Goals**

“Safety and sustainability are priorities for the city of Las Vegas, and technology is playing a key role in creating safer and increasingly efficient communities,” said Michael Lee Sherwood, city of Las Vegas director of innovation and technology. “The city of Las Vegas is dedicated to improving the quality of life for residents and visitors, and we will continue to be on the cutting edge of new technologies that can help to accomplish that goal.”

The cells will also connect to air quality sensors in selected areas to help provide near real-time information on changes in temperature, ozone and particulate levels based on time of day, traffic and construction.

“Smart lighting solutions provide cities with an opportunity to drive down energy usage and improve environmental conditions,” said Mike Zeto, vice president and general manager of smart cities, AT&T.

AT&T’s Smart Cities Alliance program brings together technology leaders and industry organizations to better serve customers with end-to-end solutions. Ubiqvia joined the alliance in early 2018, and together, the companies are delivering custom lighting and smart city services to provide scalable solutions for cities, regardless of size.

 **Smart traffic technology in Nevada**

Nevada was the first state to put autonomous vehicle (AV) legislation on the books. Last month, new legislation that further promotes research and testing on Nevada roads was signed into law. In fact, the laws in Nevada are so AV-friendly that Dan Langford, the director of the Nevada Center for Advanced Mobility (NCAM), said if you could buy a fleet of autonomous vehicles, you could have them on Nevada roads today.

Previous autonomous testing showed that Las Vegas is ready for the technology. The downtown bus shuttle pilot had 10,000 riders in 10 days, and the city is already considering a second round.

“It was a very big success,” David Bowers, the director of Las Vegas Public Works told Smart Cities Dive in May. “There was a lot of excitement about it.”

But many of the projects in the works now are happening before widespread AV deployment. The city’s partnership with Cisco has deployed technology at 10 intersections to track lighting, traffic, crowd measurement, environ-

mental and waste management.

"What we are able to do with the technology now is bring in better types of data," said Brian Hoeft, director of traffic management at RTC of Southern Nevada. This data is good, Hoeft said, for current drivers — but is also setting up for the roads of the future.

At the Consumer Electronics Show's (CES) Smart Cities Hackathon, Las Vegas offered city data for teams to use. One team developed an app for Amazon's Alexa that can tell if street lights are working correctly using historical data. The city has been in touch with the team to try out the technology since the hackathon.

Outside of apps and sensor pilots, Audi has a project that is car-based. Certain models with the technology can get data from a connected traffic light system, with drivers getting sneak-previews of upcoming red lights and countdown timers displayed on their dashboard. Drivers also need an Audi connect PRIME subscription, with updates via the cars' 4G LTE connections. RTC provides traffic signal data to Traffic Technology Services (TTS), an independent telematics company that sends the data to Audi. It's available in Las Vegas first because of the city's half-million dollar upgrades to its traffic lights.

Nexar's vehicle-to-vehicle (V2V) network turns smartphones into smart dashboard cameras. Using the phone's camera, accelerometer and gyroscope, Nexar collects data and sends it to the cloud and other drivers using the Nexar app. Drivers using state vehicles will get the app first in the first statewide vehicle-to-vehicle network. Nexar's network has reported a 24% reduction in accidents in smaller pilots they have already been tried out.

Harmonizing with the Tech Landscape:

Manufacturing and energy are pivotal in providing jobs and enhancing the quality of life across Nevada. The state's commitment to technological advancement, particularly in its manufacturing and energy sectors, is well-established. iLamp Nevada aims to become a central player in this technological shift, integrating the state's manufacturing strengths and unique innovations into iLamp's extensive distribution network. This strategic move is designed to highlight Nevada's tech expertise on an international stage, boosting licensee profitability through global sales and technology exchanges.

Grid Resilience and Sustainable Transformation:

The warning signs for Nevada

Here are a few specific examples where the electric grid in Nevada experienced outages or other issues:

January 2021: A winter storm caused widespread power outages throughout the state, with over 350,000 NV Energy customers losing power.

September 2020: A wildfire in the Reno area caused power outages for over 70,000 NV Energy customers.

July 2020: A heatwave caused widespread power outages throughout the state, with over 50,000 NV Energy customers losing power.

December 2019: A winter storm caused widespread power outages throughout the state, with over 250,000 NV Energy customers losing power.

September 2019: A wildfire in the Reno area caused power outages for over 50,000 NV Energy customers.

In 2020 The state's largest electric utility NV Energy issued a wide-ranging call to customers asking for voluntary electricity cutbacks between 2 p.m. and 9 p.m. on Tuesday and Wednesday in order to "offset energy supply issues caused by record-breaking heat throughout the Western United States."

While reducing electric usage has been a regular push for the utility, a specific call for reducing power consumption because of potential energy supply issues hasn't happened since the rolling blackouts in the [California energy crisis in 2000 and 2001](#), NV Energy CEO Doug Cannon said in an interview.

And just like two decades ago, Nevada's proximity to California is exacerbating issues with Nevada's energy supply. But California's issues — which include [several days of rolling blackouts](#) for millions of residents — aren't the only factor that led to the call for reducing electric use.

Other reasons include continual record-high temperatures, poor weather conditions from smoke and fires blowing into northern Nevada, a later peak in expected energy use than projected by the utility and the COVID-19 pandemic keeping more people home and using more electricity in their homes.

"This really is an unprecedented event on the Western energy grid, and we are seeing unprecedented demand on the Western energy grid right now,"

Cannon said in an interview. “You talk about 100-year flood events, these kinds of unprecedented events that occur, I would put the demand that we’ve seen over the last five days in that category.”

Although NV Energy is the primary electric utility and grid operator in Nevada, the flow of electricity does not stop at any single state’s boundaries. Power generation between Nevada and neighboring states is bought and sold freely to help make up gaps in power supply — a boon during normal times and a problem during times of scarcity.

Electric use data show that the call for conservation has so far worked out. Cannon said that combined electric reduction from residential and business customers shaved about 250 to 300 megawatts of expected demand off of “peak” electric usage on Tuesday, the equivalent of a small-to-medium power plant’s output.

Cannon said it was probable that Wednesday would be the last day the utility asked customers to voluntarily reduce electric usage, as temperatures across the western part of the country are expected to drop through the rest of the week.

But the widespread public call to reduce electric usage has been met with concern and confusion about Nevada’s energy supply plan, with fears that the state could end up following the same path of rolling blackouts and electric uncertainty currently befalling California.

Cannon said that NV Energy was taking steps to ensure adequate future energy supply, from a [\\$2 billion planned statewide transmission upgrade](#) to the wide suite of expanded solar generation and battery operations contracting with the utility to expand capacity.

“I don’t think it’s something that customers need to spend a lot of time being concerned about,” he said. “We have a very robust plan to provide energy resources for Nevada.”

Potential partners

NV Energy

<https://www.nvenergy.com/>

NV Energy has served citizens in northern Nevada for more than 150 years, and southern Nevada since 1906. Today, our service area covers nearly 46,000 square miles of the fastest growing state in the U.S., including the communities of Las Vegas, Reno-Sparks, Henderson and Elko. NV Energy provides a wide range of energy services to nearly 1.3 million electric customers throughout the state and more than 50 million tourists annually.

Nevada Power, Sierra Pacific Power and Sierra Pacific Resources merged in July 1999. In 2008, the subsidiaries began doing business as NV Energy signaling our commitment to serving Nevada's energy needs.

NV Energy began serving Las Vegas in 1906 when the city was little more than a village at the end of a railroad line. The company's first distribution system was powered by a small generator and the copper wires were supported by 6- by 8-inch redwood timbers from the town lumberyard.

Overton Power District No. 5

<https://www.opd5.com/>

Overton Power is a non-profit general improvement district created in 1935 by the State of Nevada. The District's service area encompasses the North-east quadrant of Clark County, Nevada, which includes the City of Mesquite and the unincorporated towns of Bunkerville, Glendale, Logandale, Moapa, and Overton. The District's service area also includes the Moapa Band of Paiutes, Valley of Fire State Park and portions of the Lake Mead National Recreation Area including Overton Beach and Echo Bay

Valley Electric Association

<https://vea.coop/>

Valley Electric Association employs about 130 teammates to serve more than 45,000 people across a 6,800-square-mile area in Southwest Nevada. Headquartered in Pahrump, Nevada.

Valley Electric Association was consolidated in 1965 from four early power companies serving distant communities in our corner of the state: Amargosa Valley Electric Cooperative, Beatty Utility Company, Pahrump Utility Company, and White Mountain Electric Cooperative in Fish Lake Valley. These

companies joined forces because they understood a basic principle of the cooperative model..

Valley Communication Association

<https://valleycom.com/>

Valley Communications Association's (VCA) fiber backbone utilizes the electric infrastructure built by Valley Electric Association. By piggybacking on the reliable poles and wires already in place, VCA has been able to provide the fastest, most reliable internet service available at a very competitive price. Through this relationship, VCA was able to establish Beatty as the first all-optical-fiber community in Nevada.

Lincoln County Power District No. 1

<https://lcpd1.com/>

Lincoln County Power is a member of the Touchstone Energy Cooperative.

Touchstone Energy® Cooperatives is a national network of electric cooperatives and districts across 46 states that provides resources and leverages partnerships to help member cooperatives and their employees better engage and serve their members. By working together, Touchstone Energy cooperatives and districts stand as a source of power and information to their 32 million member-owners every day.

Community-friendly values mixed with the not-for-profit business model are what make electric co-ops and districts strong. As a not-for-profit entity, members know they can trust their electric utility, because it was created to deliver on the promise of providing safe, reliable and affordable electricity to member-owners – not to generate money for shareholders.

<https://www.touchstoneenergy.com/>

Mt Wheeler Power

<https://www.mwpower.net/>

Mt Wheeler Power is a member of the Touchstone Energy Cooperative.

Mt. Wheeler Power currently services more than 4,600 member-owner accounts disbursed over a 16,000 square mile territory in four Nevada counties and three Utah counties.

Well Rural Electric Company

<https://www.wrec.coop/>

Wells Rural Electric Company is a member-owned, non-profit cooperative that provides electrical service across 1,400 miles of power line to more than 10,000 square miles of Northeastern Nevada and part of Tooele County in Utah.

Incorporated in 1958 to obtain central station power for the rural areas around Wells, WREC started operation in June of 1960 with 583 customers and has since grown to more than 6,000 accounts with headquarters in Wells and offices in Carlin and West Wendover.

Our owners range from residential users to business owners, casinos, ranchers and mining operations with a total load in excess of 140 megawatts.

Raft River Rural Electric Cooperative

<https://www.rrelectric.com/>

Raft River Rural Electric Co-op, a non-profit consumer-owned electric cooperative, safely delivers reliable electricity to more than 5,000 residential and commercial services in Idaho, Utah, and Nevada. Raft River Rural Electric Co-op's distribution system consists of over 2,340 miles of line.

As a cooperative, Raft River Electric is owned by the members it serves. Being a non-profit business, the cooperative's goal is to offer its members dependable electric service at the lowest possible cost.

Harney Electric Cooperative

<https://hec.coop/>

Harney Electric Cooperative (HEC), headquartered in Hines, Oregon, with a district office in Orovada, Nevada and a satellite office in Fields, Oregon is an electric transmission and distribution cooperative that serves over 20,000 square miles in southeast Oregon and northern Nevada. The coop was founded in 1954 to provide power to rural farmers and ranchers in the region and now serves approximately 4,000 meters with 400 miles of transmission line and over 2,600 miles of distribution lines spanning across Harney, Malheur, Deschutes, Crook, Humboldt and Lake counties.

HEC is a consumer-owned cooperative. Its policies are established by a

seven-person Board of Directors - each board member is a bill-paying, residential member elected by fellow members.

Additional utilities and their rates can be found here - <https://findenergy.com/nv/>

Further potential contacts

Elevation

Solar energy company
Paradise, Nevada
+1 866 634 5291
poweredbyelevation.com

Bombard Renewable Energy

Las Vegas, NV
+1 702 263 3570
Bombardre.com

Universal Solar Direct

Las Vegas, NV
+1 702 978 7338
Universalsolardirect.com

Sol-Up

Las Vegas, NV
+1 702 586 9800
Solup.com

Robco Electric

Las Vegas, NV
+1 702 614 4900
www.robcoelectriclv.com