

# iLamp Roadmap for The Continent of Africa

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



Africa Population

#### 1.216 Billion

GDP

### \$3.1 Trillion

Minimum Streetlights Required

#### 124 Million

More than 75% of the African population lives without public lighting.

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.

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A proven model: The iLamp model has already established its viability and effectiveness through successful territories globally. These territories have served as dynamic testbeds, showcasing the tangible benefits and operational excellence of the iLamp solution. As a prospective licensee, you have the unprecedented advantage of building upon this established foundation, taking the helm of iLamp Africa to steer the expansion and consolidation of this groundbreaking venture across the continent.

iLamp extends far beyond a streetlighting solution; it equips iLamp Africa with a suite of strategies designed to unlock significant economic and social benefits, generate revenue, raise money, enhance public safety, and establish a strong technological platform that attracts ad inspires African tech innovators and developers.

Comprehensive Rights: The rights granted are immensely beneficial for iLamp Africa, providing a robust framework to optimize their operations, manage capital requirements, and generate ongoing revenue. iLamp Africa can effectively and immediately generate revenue through sublicense sales, which also charge royalties on the revenue generating activites of sublicensee's. Rights are flexible, for example sales rights, may be sublicensed down to a very local level, reaching local experts who have better local connections and can exploit them more effectively, while with manufacturing or distribution rights it may be more beneficial when exploited at a national or regional level.

**Utilities**: The Power as a Service (PaaS) model, where customers pay for the clean energy generated and used by the device, sets a precedent for establishing a new kind of utility company and a new model to help existing utilities to adopt sustainable practices starting with iLamp. This leads the way for new utilities focusing on local clean energy production, detailed billing, and dynamic on-device management.

**Local Rights**: iLamp's commitment to granting local operator rights drives local job creation in different sectors, from manufacturing, distribution, sales, production, installation and maintenance. By leveraging regional talents and materials, it supports economic growth and regional prosperity.



Creativity is the power to correct the seemingly unconnected.

- William Plomer

### 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.

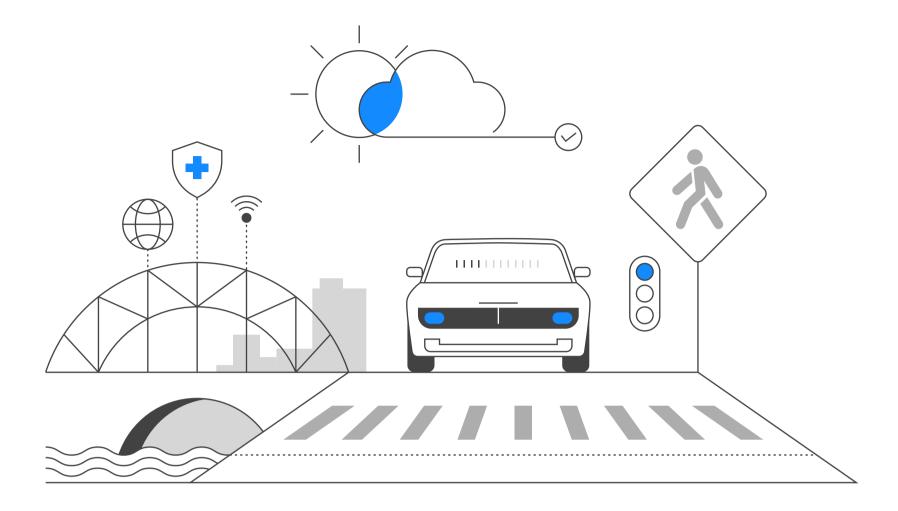
Each iLamp is customizable to meet the needs of different neighborhoods-supporting add-ons like 5G WiFi, traffic management, CCTV, environmental sensors and a plethora of other modules, sensors and software. This modularity ensures a quick, plug-and-play setup, making it adaptable and future proof and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

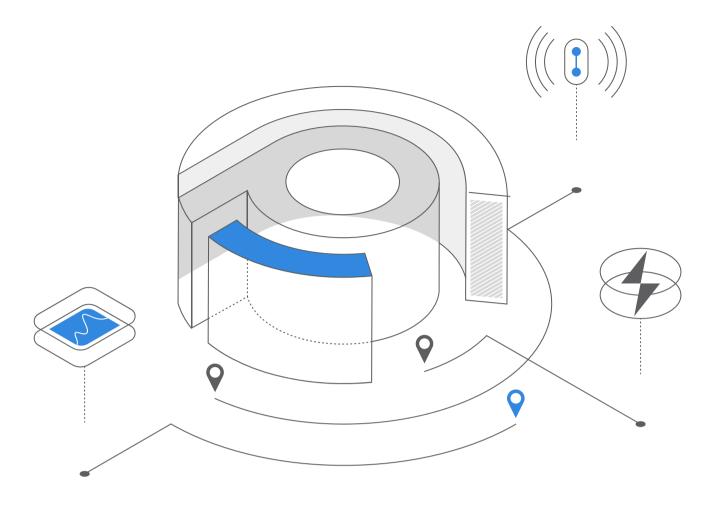
iLamp has a transformational effect on communities making them safer, more prosperous, social and desirable. It is the single most cost effective improvement any country, city, town or neighbourhood can make, offering multifaceted benefits that dramatically outweigh its costs.

**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.



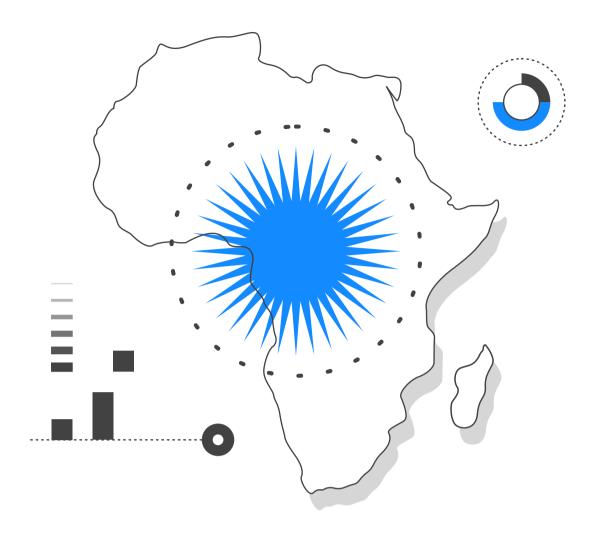
# The Power of Conflow

#### 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 African Opportunity

Africa, a continent rich in cultural heritage and diverse landscapes, is embracing a significant transformation in its urban infrastructure, aligning with its dynamic evolution in technology and innovation. The introduction of iLamp to the African market is set to create a powerful synergy between Africa's drive for modernization and the global movement towards smart city advancements.

#### Harmonizing with The Tech Landscape:

Manufacturing and energy are crucial to providing jobs and increasing quality of life across Africa. The continent's dedication to technological advancement, particularly in its manufacturing and energy sectors, is widely recognized. iLamp Africa aims to become a central figure in this technological shift, blending the continent's manufacturing strengths and unique innovations into iLamp's extensive distribution network. This strategic initiative is designed to showcase Africa's tech expertise on an international stage, enhancing licensee's profitability through global sales and technology exchanges.

#### Grid Resilience and Sustainable Transformation:

In Africa, where energy needs are rapidly evolving, the balance between modernization and sustainability is critical. iLamp emerges as a leader in this

area, offering a self sufficient lighting solution that bolsters resilience and advances security. It represents a significant step towards safe and sustainable urban living across the continent.

#### Power-as-a-Service (PaaS) Model: A Leap into the Future:

iLamp's Power-as-a-Service model is transformative for African energy providers, launching them into the future of clean energy and intelligent utilities. This model represents a revolutionary shift from traditional power distribution to a system that prioritizes local generation, efficiency, and innovation in energy management.

#### New Revenue Avenues and Technological Integration:

iLamp's modular design paves the way for groundbreaking technological integration, where African innovations are made available to iLamp buyers and owners globally. This taps into Africa's burgeoning tech sector, fostering new revenue streams and ensuring each iLamp unit becomes a hub of high tech solutions that contribute to the digitalization of African cities.

#### Public Safety, Health, and Connectivity:

iLamp aligns with Africa's goals for enhanced public safety and health, potentially integrating into continent wide safety networks. Its multifunctional capabilities ensure brightly lit streets and support public health and environmental monitoring. Additionally, its communication modules could form the backbone of Africa's digital infrastructure, enhancing connectivity across the continent.

#### Economic Benefits and Reach Beyond Urban Areas:

The economic potential of iLamp in Africa is significant, with the capacity to extend beyond major urban centers like Lagos, Nairobi, and Johannesburg, reaching into semi-urban and rural areas. This holistic approach ensures a consistent and advanced technological presence throughout the continent, lighting every corner with smart, efficient solutions.



## **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 tra=nsportation 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 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 Polution Reduction

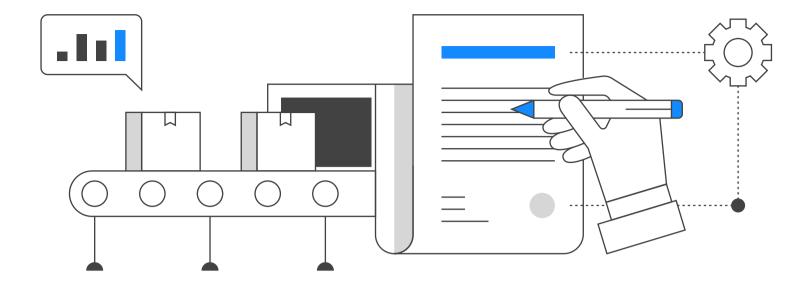
The adaptive lighting capabilities of iLamp can minimize light pollution by adjusting brightness levels according to the time of day and surrounding conditions. This can contribute to a better night-time environment, reducing the impact of artificial light on wildlife and human health.



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.



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.

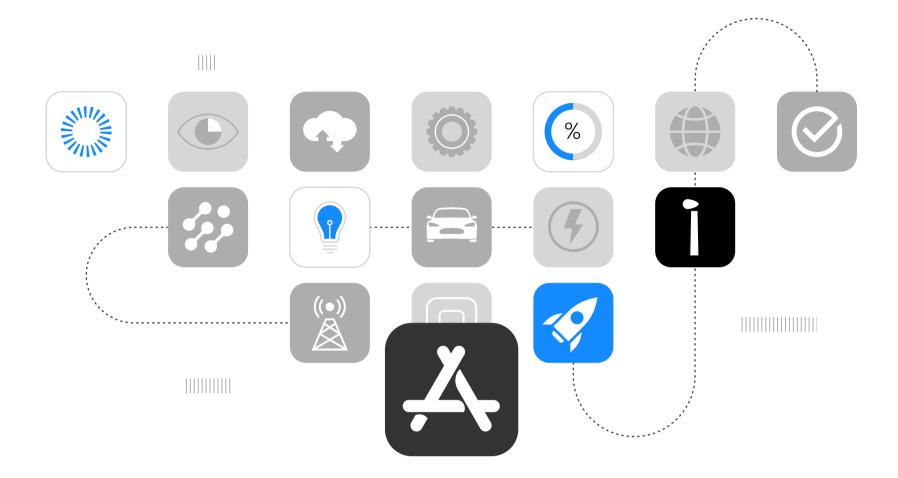
#### 10. Access to a Repository of Solutions:

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 Al-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.



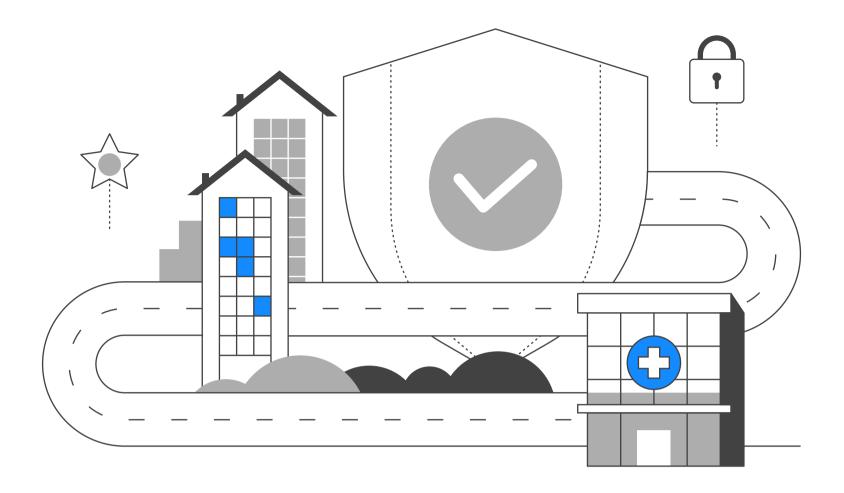
#### Video Surveillance

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.



# **Enhanced Street Lighting**

African countries have some of the highest measured crime rates in the world, making 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.

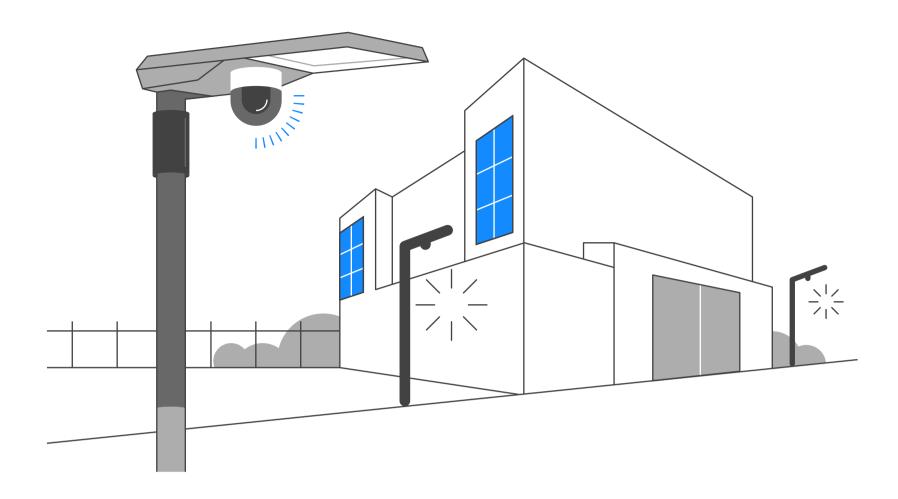
A 1% reduction in overall crime can lead to a 0.5% to 1% increase in property values. A 10% reduction in crime can result in a substantial increase in property values, potentially up to 8%.

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 Africa to improve public safety, reduce crime, and boost property values. Given the continents 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 which take place across Africa.

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-paint-er-the\_impact\_of\_street\_lighting\_on\_crime\_fear\_an.pdf

Colege of Policing - Improved Street Lighting https://www.college.po-lice.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 Africa, enabling immediate commencement of operations across the vast continent. 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 Africa have the unique advantage of recruiting a team of local experts, who bring an intrinsic understanding of the continent's diverse and expansive 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 African market.

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

Sublicensees in Africa are adept at navigating the continent's bureaucracy, regulations, policies, and understanding cultural nuances and market dynamics. This proficiency leads to more effective market penetration. It also spreads 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 Africa.

The sublicensing model is inherently scalable, enabling iLamp Africa to expand its reach across the continent 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 Cede Bank, tailored for the African market.



#### **SUBLICENSING OPPORTUNITY**

State	Population	Street Lights	Addresssable	Territory Price
Nigeria	223,804,632	19,471,003	1,693,977	\$44,760,926.40
Ethiopia	126,527,060	11,007,854	957,683	\$25,305,412.00
Egypt	111,942,661	9,739,012	847,294	\$22,388,532.20
DR Congo	102,262,809	8,896,864	774,027	\$20,452,561.80
Tanzania	69,419,073	6,039,459	525,433	\$13,883,814.60
South Africa	59,414,495	5,169,061	449,708	\$11,882,899.00
Kenya	55,100,587	4,793,751	417,056	\$11,020,117.40
Uganda	48,582,334	4,226,663	367,720	\$9,716,466.80
Sudan	48,109,006	4,185,484	364,137	\$9,621,801.20
Algeria	45,606,481	3,967,764	345,195	\$9,121,296.20
Morocco	37,840,044	3,292,084	286,411	\$7,568,008.80
Angola	36,684,203	3,191,526	277,663	\$7,336,840.60
Ghana	34,121,985	2,968,613	258,269	\$6,824,397.00
Mozambique	34,697,068	3,018,645	262,622	\$6,939,413.60
Madagascar	30,325,732	2,638,339	229,535	\$6,065,146.40
Ivory Coast	28,873,034	2,511,954	218,540	\$5,774,606.80
Cameroon	28,647,293	2,492,314	216,831	\$5,729,458.60
Niger	27,202,843	2,366,647	205,898	\$5,440,568.60
Mali	23,893,796	2,078,760	180,852	\$4,778,759.20
Burkina Faso	23,251,485	2,022,879	175,990	\$4,650,297.00
Malawi	20,931,751	1,821,062	158,432	\$4,186,350.20
Zambia	20,569,738	1,789,567	155,692	\$4,113,947.60
Chad	18,278,568	1,590,235	138,350	\$3,655,713.60
Somalia	18,611,700	1,619,218	140,872	\$3,722,340.00
Senegal	17,763,163	1,545,395	134,449	\$3,552,632.60
Zimbabwe	16,665,409	1,449,891	126,140	\$3,333,081.80
Guinea	14,190,612	1,234,583	107,409	\$2,838,122.40
Rwanda	14,094,683	1,226,237	106,683	\$2,818,936.60
Benin	13,712,828	1,193,016	103,792	\$2,742,565.60
Burundi	13,238,559	1,151,755	100,203	\$2,647,711.80
Tunisia	12,458,223	1,083,865	94,296	\$2,491,644.60
South Sudan	11,088,796	964,725	83,931	\$2,217,759.20
Togo	9,053,799	787,681	68,528	\$1,810,759.80
Sierra Leone	8,791,092	764,825	66,540	\$1,758,218.40
Libya	6,888,388	599,290	52,138	\$1,377,677.60

# The Market & Financials

Africa, with its unique blend of cultural heritage and rapid development, presents a dynamic market for infrastructure innovation. The continent's dedication to modernization and sustainable urban planning provides an ideal environment for advanced infrastructure solutions like iLamp. The diversity of Africa, from its bustling cities to its expansive rural areas, offers varied opportunities for street lighting solutions.

#### **Market Segmentation**

By Area : Urban (Lagos, Nairobi, Johannesburg) vs. Rural

(Sub-Saharan regions, remote areas)

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 Nairobi and Johannesburg

at the forefront of smart city development,
Africa presents substantial opportunities.

Green Initiatives : Africa's commitment to green initiatives is in line

with iLamp's energy-efficient technology.

**Decentralized Systems**: As Africa enhances its energy infrastructure,

systems like iLamp that reduce the load on the

grid are especially beneficial.

#### **Total Addressable Market (TAM):**

The total number of public streetlights required in Africa is estimated at 124,412,395 using the Northeast Energy Efficiency Partnerships formula.

#### Serviceable Available Market (SAM):

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

#### Serviceable Obtainable Market (SOM):

Considering factors like market competition, technology adoption rate, and specific infrastructure conditions in Africa, a conservative target of 3.5% of the SAM per sublicensee with a growth rate of 25%.

## The iLamp Financial Model

The following financial model is based on a business model of selling rights for the outlined areas. It assumes the territorial license holder focuses only on the sale of sublicensing of rights and the ongoing royalties attached to those sales across Africa.

This model therefore does not directly cover the operation of any of these territories, which over the ten years covered by the financial model, allowing for one year of setup and 25% growth rate, generate half a billion dollars of revenue.

In the model the highest value sublicenses are sold first, bringing in immediate capital, over the 10 year period covered in this financial model, 30 out of the 41 identified territories with a population of over 5 million are sold.

The sales income decreases over time as the most valuable rights are sold first, as sublicensee's grow in their respective areas, royalties paid to the territorial license holder increase over time.

## Financial Model Structure

The financial model for iLamp is built around a territorial licensing system, where the territorial license holders are instrumental in expanding iLamp's reach across Africa. The model includes:

**Sublicense Sales:** The territorial license holder is assumed to sell three sublicenses annually.

**Revenue Generation:** Sublicensees are projected to start generating revenue after an initial setup period of one year, allowing time for market penetration and establishment.

**Market Capture:** Annually, each sublicensee aims to capture 3.5% of the Serviceable Available Market (SAM), with a growth target of 25% set for each subsequent year.

**Sublicense Pricing:** Pricing for each sublicense is calculated based on the number of streetlights within the territory.

**Royalty Fees:** A royalty fee, typically around 15%, is charged by the territorial license holder on the revenue of each sublicensee.

**Product Costing:** The cost of implementing iLamp is estimated per streetlight or per area covered, taking into account installation and maintenance costs.

# Further Information

This model uses the NEEP formula designed to estimate the number of public streetlights in a given area beased on population. It does not include: Power as a Service revenues, margins charged on licensing Texan born technologies to other regions or countries through the iLamp App Store or the private streetlighting market including carparks, campuses and private developments.

This model is therefore by no means exhaustive and based on assumptions and estimates subject to change, and it doesn't guarantee future performance or outcomes. It's designed as a guide for decision making and planning, with a customizable spreadsheet available for licensees to adjust parameters according to their local market conditions, ensuring relevance and accuracy in different regional contexts.

#### FINANCIAL MODEL

Year	Territories Sold	Territory Sales Income	Royalties Received	Territory-Wise Revenue
1	Algeria,Morocco,Angola	\$24,026,145.60	\$0.00	\$0.00
2	Ghana,Mozambique,Madagascar	\$19,828,957.00	\$42,962,982.94	\$286,419,886.27
3	Ivory Coast,Cameroon,Niger	\$16,944,634.00	\$89,161,398.65	\$594,409,324.31
4	Mali,Burkina Faso,Malawi	\$16,944,634.00	\$141,751,740.39	\$945,011,602.61
5	Ivory Coast,Cameroon,Niger	\$13,615,406.40	\$201,536,421.85	\$1,343,576,145.65
6	Zambia,Chad,Somalia	\$11,492,001.20	\$272,470,250.92	\$1,816,468,339.47
7	Senegal,Zimbabwe,Guinea	\$9,723,836.80	\$357,975,747.67	\$2,386,504,984.50
8	Rwanda,Benin,Burundi	\$8,209,214.00	\$457,414,630.74	\$3,049,430,871.61
9	Tunisia,South Sudan,Togo	\$6,246,278.20	\$584,924,107.81	\$3,899,494,052.08
10	Sierra Leone,Libya,Republic of the Congo	\$4,380,478.60	\$740,297,362.60	\$4,935,315,750.69
Total		\$131,411,585.80	\$2,888,494,643.58	\$19,256,630,957.18

#### **INCOME STATEMENT**

REVENUES	YEAR ONE	1	YEAR TWO	1	YEAR THREE
Royalties received	\$0.00		\$42,962,982.94		\$89,161,398.65
Sublicense sales	\$24,026,145.60		\$19,828,957.00		\$16,944,634.00
Net Sales	\$24,026,145.60		\$62,791,939.94		\$106,106,032.65
COST OF GOODS SOLD	YEAR ONE	1	YEAR TWO	1	YEAR THREE
Cost of sales	\$1,000,000.00		\$6,279,193.99		\$10,610,603.26
Gross Profit	\$23,026,145.60		\$56,512,745.95		\$95,495,429.38
EXPENSES	YEAR ONE	1	YEAR TWO	1	YEAR THREE
Royalties paid	\$2,642,876.02		\$6,907,113.39		\$3,713,711.14
Selling & Marketing	\$3,363,660.38		\$8,790,871.59		\$14,854,844.57
Rent & Utilities	\$480,522.91		\$1,255,838.80		\$2,122,120.65
General & Administrative	\$1,201,307.28		\$3,139,597.00		\$5,305,301.63
Salaries & Wages	, , , , , , , , , , , , , , , , , , , ,		, , , , , , , , , , , , , , , , , , ,		<u> </u>
Total Operating Expenses	\$7,688,366.59		\$20,093,420.78		\$25,995,978.00
OPERATING INCOME	YEAR ONE	1	YEAR TWO	1	YEAR THREE
Operating Income	\$15,337,779.01		\$36,419,325.17		\$69,499,451.38
Income Before Taxes	\$15,337,779.01		\$36,419,325.17		\$69,499,451.38
Income Tax	\$1,257,697.88		\$2,986,384.66		\$5,698,955.01
Net Income	\$14,080,081.13		\$33,432,940.50		\$63,800,496.37

# iLamp Africa and the paradigm shift

iLamp is carving a groundbreaking trajectory for Africa, envisioning a strategy that goes beyond merely entering the market to fundamentally reshaping it.

A crucial decision lies in how to allocate operational control within iLamp Africa versus the distribution of sublicenses. Direct management offers the potential for substantial profits and greater control over profit margins. However, partnering with skilled local entities can hasten market penetration, leading to faster revenue growth and providing an immediate influx of revenue.

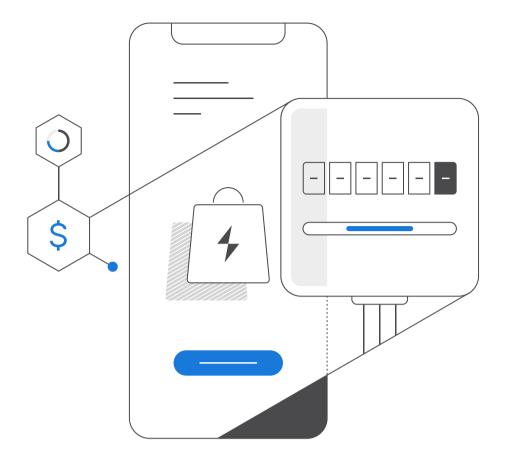
Additional income prospects arise by harnessing African-born hardware and software innovations, constructing a comprehensive ecosystem of solutions. Through the extensive iLamp distribution network and app store, these innovations can reach new markets, each generating lucrative, new revenue streams for iLamp Africa.

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

Backed by the Conflow Power Group, iLamp Africa 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 Africa.

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

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



# 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.