

iLamp Roadmap for Cameroon

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



Cameroon Population
27.9 Million

GDP
\$45.3 Billion

Electrification Rate
64% of Population
24% Rural Access

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

Exclusive License for iLamp in Cameroon

The government of Cameroon has set ambitious targets for increasing access to electricity, including a goal of reaching 70% electrification by 2035. To achieve this goal, Cameroon will need to significantly increase its electricity generation capacity and improve its transmission and distribution infrastructure.

Renewable energy sources, such as solar and wind power, hold significant potential for meeting Cameroon's energy needs. The country has high levels of solar radiation and a relatively consistent wind resource, which could be harnessed to generate electricity. Microgrids, which utilize a combination of renewable energy sources and storage options, can also play an important role in increasing access to electricity in remote or underserved areas.

Cameroon is part of The Economic Community of Central African States (ECCAS), that recently adopted the White Paper of CEEAC and CEMAC on a Regional policy for universal access to modern energy services and economic and social development (2014-2030), adopting specific targets regarding energy access, energy efficiency and renewable energies – in line with the Sustainable Energy for All initiative. At a national level, a Rapid Assessment / Gap Analysis of the energy sector was produced and will be updated in early 2016.

1. **Eneo Cameroon** is the national electricity company of Cameroon with over 1.7 million customers, almost 4,000 employees and installed generation capacity of 968MW.
2. All potential partners can be found here, there are multiple and some state owned <https://www.publicpower.org/public-power-cameroon>

iLamp.com
ILOCX.com/iLamp



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



Creativity is the power to correct the seemingly unconnected.

- Nikola Tesla

Deal Breakdown

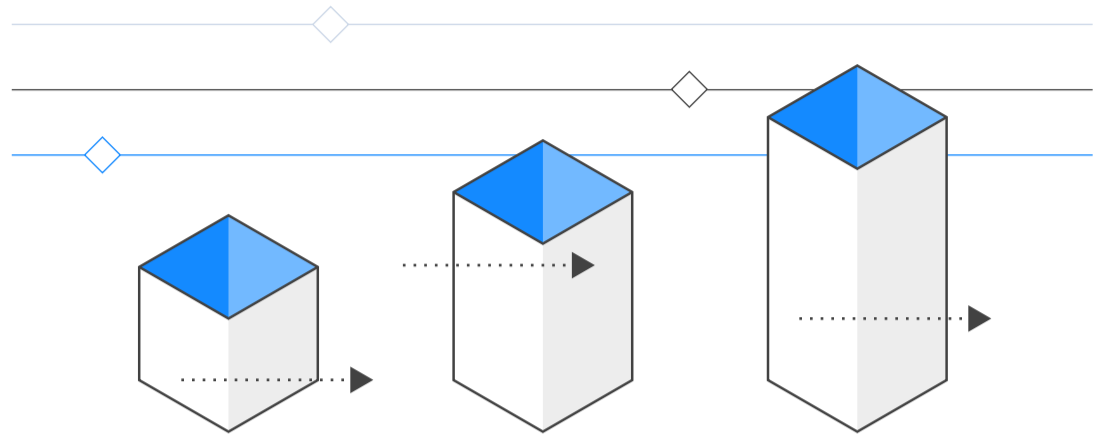
Steps to enhancing value and recurring revenue

1. Reserve the territory by purchasing 10,000 ILO units of iLamp (cost \$XXXXX)
2. Purchase exclusive license in Cameroon for \$XXXXX, pay \$XXXXX on signing and the remainder in a note payable on share of revenue and capital raised at a zero coupon for the entire term of the note. You will get an exclusive license for Cameroon, a pilot pole installed, a localized iLamp.com website (see example here colorado.ilamp.com), a listing on ILOCX for your local fundraising and promotion.
3. A more detailed roadmap with all supporting documentation and training.
4. The ability to sell sub-licences within Cameroon.
5. You pay iLamp HQ 5% of all revenue and 20% of the PaaS revenue you generate.
5. Repeat what CPG has done in California and now in 9 other States in the USA: agree to a pilot installation for iLamp. Get a contract for installation and gain 20% of the PaaS revenue from each iLamp year- on-year. 10% of the market in Cameroon would yield approx \$XXX million in iLamp sales over 10 years and generate \$XXX million in annual recurring revenue based on 20% of PaaS revenue and all other revenue sources, camera, sensors, wifi, 5G etc estimated at \$400 per pole per annum. (based on an estimated 1,000,000 poles needed for 2,352sq km of urbanised area in Cameroon).

Three steps to faster returns (Alternative option)

1. Buy \$1 million of iLamp ILO units at current price, and move to step 3 above. The result will be a double in the value of your units before your local ILO is listed.
2. List iLamp Cameroon on ILOCX and gain local support.
3. On signing we commit to supplying a sample iLamp to install in a strategic location in Cameroon and all other benefits. The \$1m iLamp ILO units purchase counts against the note as amount paid which has a large and positive impact on your opening balance sheet in iLamp Cameroon. (see at the end of the document).

Stages



1. Reservation

100,000 USD of iLamp Licenses found here <https://ilo.ilamp.com/> must be purchased and held in the account of the potential Licensee at ILOCX.

- Once this phase is complete the potential licensee has 12 months to trigger the territorial license or lose the option.
- If you have purchased 100,000 ILO units in iLamp in the alternative offer then all these payments are considered paid.

2. Get Started

Once triggered the deposit needs to be paid in the case of Cameroon this totals \$300,000 this covers all costs to install a pilot scheme in the location chosen.

- This will include delivery and installation of a iLamp with a full tech stack and codes to operate and collect data and revenue from the iLamp as a demonstration to land sales and mass installations.
- This also covers:
 - The costs to list iLamp Cameroon on the ILOCX for all upfront and first year listing fees.
 - This building and delivery of a website for Cameroon.
 - All media and images, all data and point of sale aids, email addresses, and this detailed report covering competition, USP's, market size, list of potential partners, HQ assistance for news and localized promotion of iLamp in the territory.

3. The Details

Once the option fee and deposit are paid a local legal entity needs to be formed to hold the license. This is formed by the potential licensee. The territorial license agreement can be found here ([LINK](#)) the promissory note can be found here ([LINK](#))

The Cameroon Opportunity

Cameroon could reduce its poverty rate five-fold by 2050 from 15% to 3% if it undertakes robust reforms to induce climate-action investments, says the World Bank's newly released Country Climate and Development Report (CCDR). In addition, robust investments of \$58 billion in adaptation and mitigation measures over the next 10 years could bring an additional GDP growth of 1% in 2050.

Cameroon has made progress in developing climate policy in line with its National Development Strategy (SDN30), including a set of reforms to create an enabling environment for economic growth, improved governance and institutions, and decentralization. The Central African country is also committed to 35% of greenhouse gas emission reduction by 2030.

Although Cameroon faces severe climate challenges, the country has opportunities to adapt, build resilience and move toward a low carbon future. This would require a strategic approach to use the country's potential for renewable energy and its rich natural capital endowment, making these resources central to the country's development model.

Climate change issues and policy options

Cameroon is 68 on the 2021 GCRI. It is subject to flooding, deforestation, recurrent droughts in the north, and an uncertain duration of rainy seasons. Climate change heavily affects the agricultural sector, and more particularly agro-industry, which accounts for nearly 33% of industry sector output. The urbanization rate, which reached 58% against the average of 41% in Sub-Saharan Africa in 2020, heightens challenges of sustainable urbanization, urban planning, and pollution reduction. The Nationally Determined Contribution, submitted in October 2021, aims to reduce emissions by 35% by 2030. The share of the population with access to electricity is 90% in urban areas against only 24% in rural areas. The proportion of renewable energy in the electricity mix is predicted to reach 25% by 2035, up from 2% in 2019. The population's water access rate reached nearly 62% in 2020, with a target of 80% in 2025.

Renewable technologies in Cameroon

Cameroon's energy consumption shows that biomass, electricity and petroleum are the country's three primary energy sources. Biomass consumption accounts for 74.22% of the total energy consumption, followed by petroleum with 18.48% and electricity with 7.30%. In 2018, the country's overall final energy consumption was 7.41 MTOE, with traditional biomass supplying the majority of it. The residential sector accounts for 63.68% of total final energy consumption and is heavily reliant on biomass.

Bolstered by vast energy resources such as, hydropower, biomass, solar, wind and geothermal energy, Cameroon is well-placed to expand and diversify its economy. However, these resources remain undervalued. The country relies on hydropower energy for 73% of its electricity and petroleum products for transportation. Despite Cameroon's high hydropower potential, the distribution of energy is inconsistent. With no connections to surrounding nations, just 20% of the population has access to the national grid. Therefore, there is a need for Cameroon to diversify its energy mix by incorporating renewables to improve its economy and increase the standard of living of its citizens. Cameroon is a signatory to the Paris Climate Agreement, which it ratified in 2016, and has committed to halving its greenhouse gas emissions by 2035.

Solar Energy

The average daily solar radiation varies between around 4.5kWh/m²/day in the South and approximately 5.7kWh/m²/day in the North, with the highest values in the far north region. In comparison with Germany, which averages only 1.7 kWh/m²/day, has installed more than 40,000 MW of solar energy capacity. That is to say, Cameroon's solar potential is quite huge. However, solar energy has not been well tapped into and there are currently plans to exploit this area.

Wind Energy

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Hydropower

Hydroelectric power is a non-polluting, renewable and low-cost energy source that contributes to the development of the country's economy and society. Cameroon ranks 3rd in Sub-Saharan Africa in terms of hydropower potential, behind the Democratic Republic of Congo and Ethiopia. Cameroon currently has three hydropower production dams: Songloulou (387MW installed capacity), Edea (263MW installed capacity) and Lagdo river Benuje (72MW installed capacity) with three other dams dedicated to bolstering the Edea and Songloulou plants. These three retaining dams are the Mbakaou on the Djerem, the Bamendjin on the Noum and the Mape on the Mbam.

Cameroon's electricity demand was predicted at 1455 megawatts in 2014 and is expected to reach 5000 megawatts (MW) by 2020 and 6000 megawatts (MW) by 2030. To address this increased demand, the government planned to construct 2500 MW of capacity between 2012 and 2020, including 298 MW of thermal capacity. To boost the productive capacity of the country's largest facilities and two pioneering dams (Edea and Songloulou dams), these dams will be rehabilitated to provide 75 MW of generation. Additional dams are being constructed, including Lom Pangar (170 MW), Natchigal (280 MW), Song Dong (280 MW) and Merve'elé (200 MW).

Biomass

Cameroon has the third biggest biomass potential in Sub-Saharan Africa, covering three-quarters of its area with 25 million hectares of forest and employing more than 60% of its population. Examples of biomass are agricultural waste, wood and animal waste. Cameroon's biomass potential is largely derived from agriculture and forestry. The widespread use of biomass energy for cooking, heating and lighting, particularly in rural areas of Cameroon, has resulted in widespread deforestation, which increases carbon dioxide emissions and thus global warming. In Cameroon, biomass energy resources are employed in both the household (about 75% of residential energy consumption) and industrial sectors (approximately 90% of energy demand). Despite the country's vast forest reserve, inappropriate use of this potential has resulted in significant deforestation rates throughout the country.

Cameroon street lighting projects

In Cameroon, the Association of United Councils and Cities of Cameroon (UCCC) signed a public-private partnership (PPP) with the French company Sunna Design for the deployment of 100,750 solar street lamps in several rural municipalities. According to Augustin Tamba, president of the UCCC, the first phase will end in April 2023 with the installation of 17,750 solar street lights.

The company, based in Blanquefort in south-west France, will use streetlights from its iSSL+ range, which operates with “Sunnap” connected technology. This solution will eventually accelerate public lighting via solar energy in Cameroon. The agreement also provides for the construction of a factory to assemble these solar lanterns in the commune of Yaoundé 7 in order to promote the transfer of the necessary technologies for the creation of local jobs

An urban microgrid to power street lights in Yaoundé, Cameroon

The city of Yaoundé in Cameroon regularly experiences power outages and selective power cuts during peak electricity use from 6 to 8 p.m. – when street lights come on. Emergency diesel generators are used to power communal buildings during these cuts – a costly, pollution-generating solution the city would like to limit.

In addition to the service continuity issue, street lights in certain areas are in disrepair. The Cameroonian State has therefore launched a street lighting upgrade programme, prioritizing the replacement of lights in Yaoundé and Douala. As part of the programme, the Yaoundé Urban Community would like to develop a more ambitious project to secure the energy supply for public infrastructure (the city hall building and street lighting) and contribute to the city’s energy transition.

Minigrids Act as the Seed of Change in Cameroon

In the Central African country of Cameroon, electricity is scarce outside of major cities. But that may soon change because of a public-private partnership that has a set goal of installing 750 minigrids.

The effort is about more than lighting up the 11,000 villages that lack power; the partners hope to foster long-term social, environmental and economic benefits.

Cameroon internet access

Begun with the installation of seven solar minigrids by Renewable Energy Innovators Cameroon (REIc), the project is a partnership between the US Trade and Development Agency (USTDA), SimpliPhi Power, Morua Power and REIc.

The project is expected to be a model for more than 750 minigrids that REIc would develop. The minigrids will range in size from about 40 kW to about 150 kW, providing enough electricity for phone charging, WiFi and lighting for several dozen to 100 households. The larger minigrids will serve hospitals, said Jesse Gerstin, director of sustainable business development at SimpliPhi Power.

Up to 100,000 rural households in Cameroon could be provided with electricity via 134 separate solar-plus-storage minigrids.

There were **10.05 million** internet users in Cameroon in January 2022.

Cameroon's internet penetration rate stood at **36.5 percent** of the total population at the start of 2022.

From a general observation, the limited access in Cameroon is mainly distributed in urban regions of the country, creating a digital divide with rural areas. Although the government has launched a series of projects such as the multipurpose community telecentres, the national optical fibre backbone, and the landing of new submarine cables, accessibility does not seem to have improved as expected. Some projects, such as the multipurpose community telecentres, have even been a total failure. Initially designed in the early 2000s to reduce the intra-digital divide between rural and urban regions. Of the 2000 telecentres that were supposed to be deployed by the end of 2015, less than 250 have been built, with only a few of them operational. The project has been considered as a money pit, even though it was mainly financed by a special fund consisting of the yearly contribution of telecommunication operators (3% of their turnover), and other subsidies coming from the government. The lack of results pushed the government to put the project on standby at the end of 2015.

Individual internet access is unaffordable for most Cameroonians and women are marginalized in terms of using this technology. Mobile internet tariff choices in Cameroon are difficult to navigate due to the multitude of different offerings. These are all reasons why, despite a literacy rate of about 77%, the proportion of internet users in the country is only 34%.

Since 2002, online access has been used primarily for administrative purposes. Inside government structures, information and communications technologies (ICTs) have been used to improve governance, especially when it comes to corruption. The SIGIPES programme is a good example of this. It keeps track of civil servants' professional career records, to prevent fraud and practices like claiming double or triple salaries. Other technological reforms have involved SYDONIA, which is a trans-border customs clearance programme enabling the tracking of merchandise.

Advancements are also noticeable when it comes to the digitisation of the press. The main Cameroonian newspapers are now available online, which shows a certain familiarization of the internet among Cameroonian intellectuals and the middle class. A number of websites now also offer a wide range of information on government activities, including those of the Presidency, as well as companies and non-governmental organizations.

Nevertheless, infrastructure to support online communication is not assured due to lack of funding and maintenance, which also raises connectivity costs. In terms of sharing information over the internet, no significant limitations, such as censorship, have been found. State intrusion into the online sphere is nonetheless suspected, according to the Institut Panos Paris.

The warning signs for Cameroon

Climate change is expected to affect Cameroon's climatic zones differently, and **extreme weather events will be more frequent and intense**.

Cameroon's northern regions are to remain the most vulnerable to climate, followed by coastal areas and the highlands.

Climate change is also an imminent threat to the country's dependence on natural resources and Cameroonians' dependence on agriculture for livelihoods and subsistence. Under current climate conditions, about two million people live in drought-affected areas.

Tropical forests cover almost 40% of the country and provide an estimated 8 million rural people with traditional staples including food, medicines, fuel, and construction material. Changes in temperature, rain, and droughts are putting these populations at greater risks for increased poverty and famine.

The socioeconomic impact of climate change shocks is hurting both the structural poor and the close to 40% of vulnerable households in Cameroon. Women, especially those living in conflict areas or indigenous groups, are

more severely hit by climate change because they account for 75% of workers in the informal agricultural sector and are primarily responsible for the welfare of their households and food security.

Opportunities for accelerating adaptation and decarbonization

Cameroon is part of the Congo Basin, which is one of the three largest forests in the world and the largest carbon sink in the world. Over the past two decades, Cameroon has cut its emissions through reforestation and by shifting its energy mix toward renewables. As a result, emissions went from 9.32 tons of CO₂ emissions per capita in 1998 to 4.89 tons in 2018. Yet, investments are needed in accelerating adaptation and resilience in agriculture, livestock, roads, schools, and the health system.

Potential partners

Actis Energy Cameroon Holdings (Eneo)

<http://eneocameroon.com/>

Eneo is the company holding the concession in Cameroon's public electricity sector. It owns and operates over 900 megawatts (MW) of generation capacity and distributes electricity to more than 1 million residential, corporate and industrial customers.

Based in Cameroon's economic capital, Douala, the company employs over 3,700 people across the country.

Canopy Energy

<https://canopy-energy.com/>

Canopy Energy was born in 2008 and started by developing solar power plants. Our rising awareness of the climate crisis has led us to transform our activities.

- **Development:** we are involved at all stages of the projects we develop, paying particular attention to the social co-benefits brought to local populations;
- **Consulting:** we support companies in the implementation of their "low carbon" strategy;
- **Financing:** we invest in transition projects and our customers can, if they wish, be part of the projects' financing.

Since 2021 and in order to contribute to the common effort of carbon neutrality, Canopy Energy has implemented its climate strategy and offset its emissions.

Wilmosolar

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

In 2013, the company WILMOSOLAR was founded. While the solar market explodes in the world, WILMOSOLAR makes itself available to the public and offers high quality services. For us, the sun is by far the greatest source of renewable energy. That is why we want to make it possible for everyone to benefit from this energy.

Pova Technologies

<https://povatech.com/>

Pova Technologies is an engineering company specialized in providing technical services. We're experts in Solar energy, Satellite Television, Video Surveillance, Computer Maintenance, Internet Services and lot's more. We equally supply all the appliances and accessories that we use for all our installations. From consultation to installation to maintenance, you can rely on us for the best technical services.

Labacorp Energy

<https://labacorpenergy.com/>

Labacorp Energy Limited (LEL) is an indigenous Cameroonian energy company that provides specialized and innovative solar energy solutions and services. With our expert international knowledge, local experience, and partners, we offer an effective top-notch business solutions and services with an impressive track record of solving energy problems.

REI Cameroon

<https://www.tnec.com.my/>

Created non-profit initiative called WL&P which started replacing bush lamps with rechargeable electric lamps in the village of Allat in the Adamawa region of Cameroon

Evolved from non-profit to a commercial venture called REIc.

Winsolartech SARL

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

Located in Douala, Cameroon, Winsolartech SARL is an important Cameroonian company passionate and specialized in renewable energy, which offers photovoltaic integration systems, solar panels as well as solar water heaters. Our mission is to offer a better service with the best products, and this, in the most responsible way possible. The company's mission is first and foremost to improve accessibility to renewable energy.

African Solar Generation

<https://asgeneration.com/>

African Solar Generation (ASG) is a Swiss-Cameroonian solar company based in Yaoundé, Cameroon. The company's vision is to combat energy poverty in Cameroon at all levels – from lighting for families to supplying electricity to businesses, administrations, farms, International Organizations, schools and many more. ASG's goal is to install high quality solar material, imported mainly from Europe, and to offer customers an outstanding after-sales and maintenance service.

ACP Energy Co. Ltd

<http://www.acpenergy.com/>

ACP ENERGY Co. Ltd. is located in Doula, Cameroon. The specialization areas of the company are Environmental and Energy Consultancy Services, including Power Plant Design and Auditing, Project Evaluation and Management, and offering Seminars and Training in Renewable Energy (Wind, Solar and Biomass). Furthermore, our company is able to provide technical support, equipment testing, and technical consultant as an O&M service provider and also providing services to foreign companies to enter the African Market. The principal object of our company is to provide Environmental and Energy Solution Services to all sectors public and private at International and Local Levels.

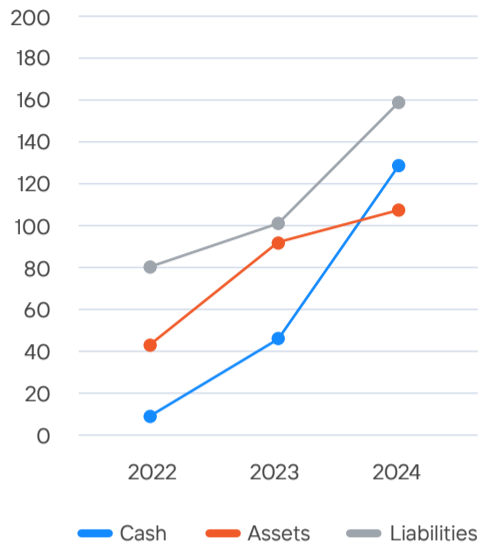
Solar Hut Energy

<https://www.solarhut.energy/>

Solar Hut was founded by Emmanuel Monthe Siewe While on a tour of rural Cameroon, he saw locals struggling with energy scarcity, many children studying under the light of a cell phone or with candles. Aware of solar energy technology, he first donated solar lamps to aid the different communities he had visited. However, once he saw how rampant the energy problem was in other areas, he formed a small team and launched a pilot project. In 2019 Solar Hut was officially formed.

Today Solar Hut employs over 50 people and has impacted the lives of over 5000 people.

Financials



Balance Sheet

Company name, iLamp Colorado Inc

Dec, 31, 202X

Assets

Current Assets

Cash	7,314	-392,686
Accounts receivable		
Inventory	5,560	5,560
Prepaid expenses		
Short-term investments		

Total current assets 12,874 -387,126

Fixed (Long-Term) Assets

Long-term investment	2,310	102,310
Property, plant and equipment	14,442	14,442
(Less accumulated depreciation)	-2,200	-2,200
Intangible assets		3,000,000

Total fixed assets 14,552 3,114,552

Other Assets

Deferred income tax		0
Other		0

Total other assets 0 0

Total Assets 27,426 2,727,426

Liabilities and Owner's Equity

Current Liabilities

Accounts payable	9060	9,060
Short-term loans		0
Income taxes payable	3349	3,349
Accrued salaries and wages		0
Unearned revenue		0
Current portion of long-term debt		0

Total current assets 12,409 12,409

Long-Term Liabilities

Long-term debt	3450	2,703,450
Deferred income tax		
Other		

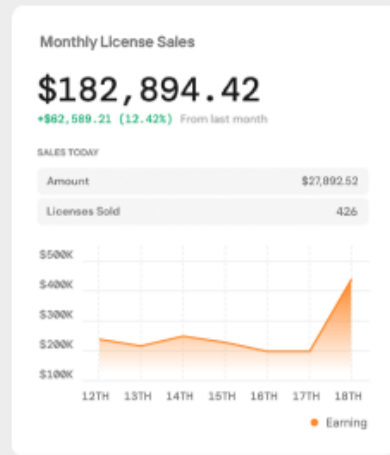
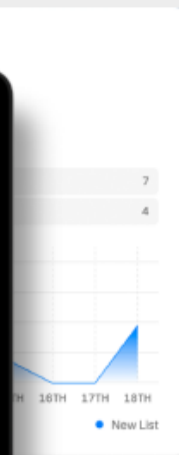
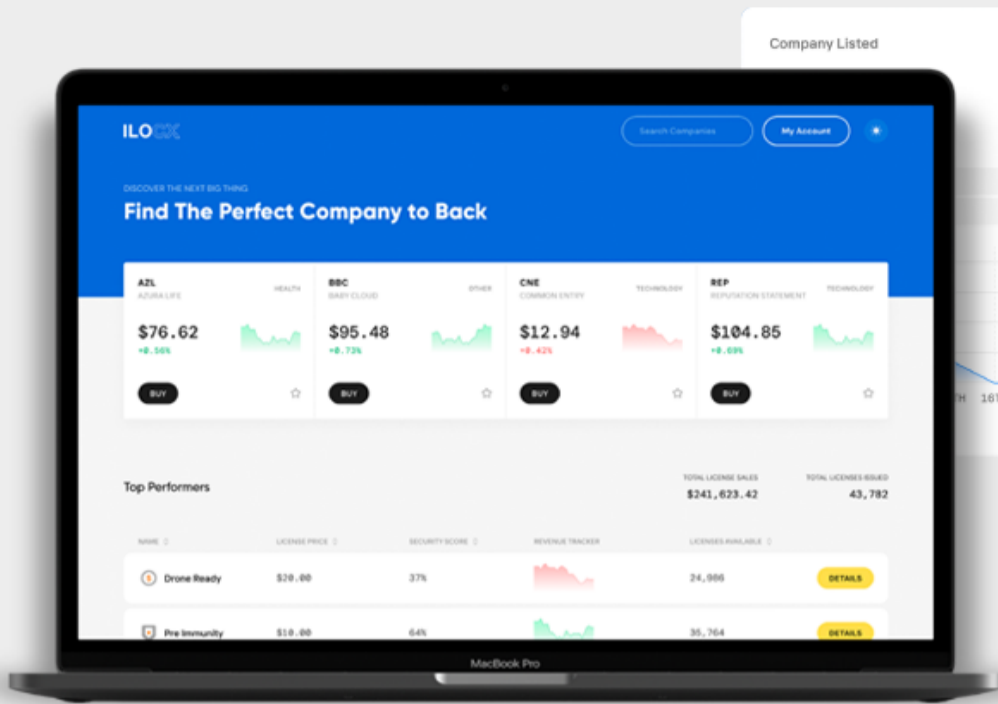
Total fixed assets 3,450 2,703,450

Owner's Equity

Owner's investment	6000	6,000
Retained earnings	5567	5,567
Other		

Total owner's equity 11,567 11,567

Total Liabilities and Owner's Equity 27,426 2,727,426



Your ILO listing

List using the ILO Framework to raise money to finance your exclusive iLamp license while building local support and an online sales team to drive pre-sales.



RAISE MONEY AS YOU NEED IT

Get access to the funds you need, as you need them, smoothing your fundraising process.



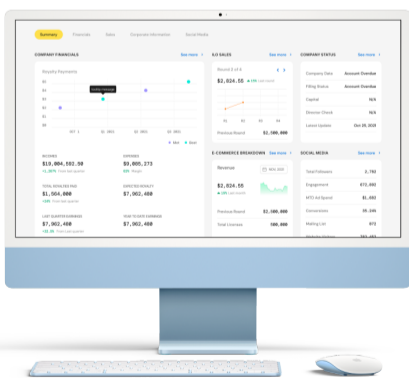
BUILD A TEAM

ILOCX framework helps companies to build effective teams that are properly rewarded.



REWARD PARTICIPATION

Incentivize buyers with ILOCX rewards, your own affiliate program, and license classes.



Listing Requirements

iLamp licenses are prequalified to list and receive an ILO instance and will be priority listed through our streamlined process with a dedicated listing manager.

Listing fees for iLamp licenses are waived for the first year, then only \$25,000 per year.

Listings with over \$1 million in sales are listed on the board at ILOCX.com.

100+
Total companies listed

Millions
Total licenses issued

10X
Returns already booked