
5th OVERVIEW OF PRIVATE PARTICIPATION IN LIGHTING PUBLIC

ISSUE 5 - 2025



ABCIP

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PUBLIC LIGHTING PROVIDER

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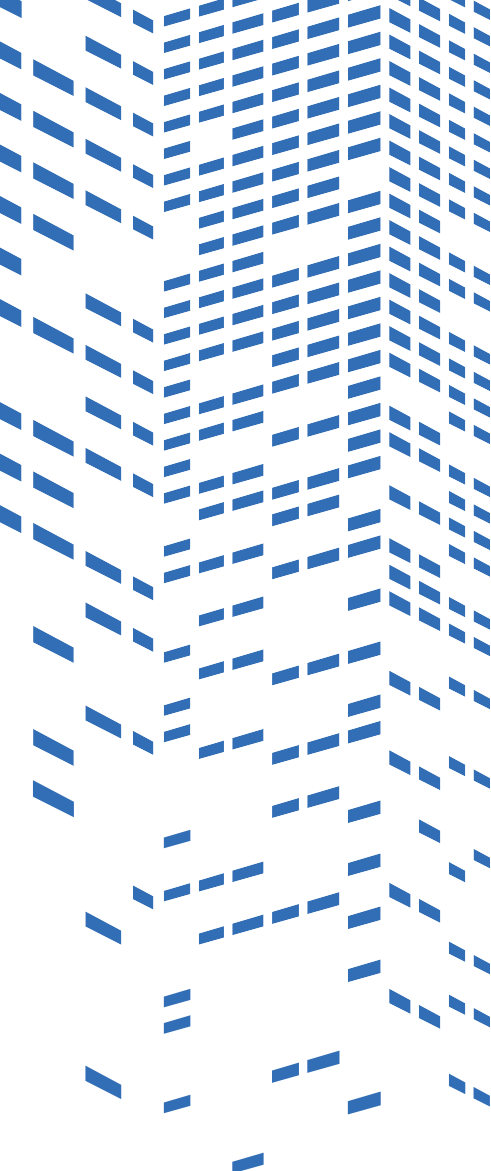
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5th OVERVIEW OF PRIVATE PARTICIPATION IN PUBLIC LIGHTING

2025





WORKING GROUP

OVERVIEW OF PRIVATE PARTICIPATION IN PUBLIC LIGHTING
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ONLY THE COMBINE EFFORT OF PUBLIC AND PRIVATE INITIATIVES CAN SOLVE THE DEFICIT IN ESSENTIAL SERVICES

The optimism of the companies verified through ABCIP research carried out in partnership with EY is confirmed three years later. In the last year alone, 40 bids were registered, culminating in 146 lighting concessions in 173 municipalities, benefiting 27% of the Brazilian population. As can be seen in this issue, another new fact is the good performance of intermunicipal public consortia: four are already in full operation, showing the potential of this arrangement for smaller municipalities.

The results arise from the continuous and joint effort between the public and private sectors. Exclusive interviews with representatives of the Ministries of Citizenship, Integration and Regional Development and Civil House show the commitment of the Federal Government to provide resources and training for cities to face the deficit in the provision of essential services to the population.

To the primordial effort expended by BNDES and CAIXA are now added initiatives from BANDES, BRDE and Banco do Nordeste. Banco do Brasil has been investing in the qualification of public agents in order to strengthen the PPP ecosystem. To resources FEP



PEDRO VICENTE IACOVINO
PRESIDENT OF ABCIP

– Project Structure Fund (FEP) joins those of the Sustainable Regional Infrastructure Development Fund – FDIRS, highlighting that 50% of PPP projects that apply for the use of these resources are for smart cities. After all, the general conviction is that only better quality public services will reduce socioeconomic inequalities in the country.

On the other hand, the effects of the tax reform are already being felt in the sector. Aware of the demands of cities and the fact that public lighting infrastructure is strategic for connected cities, most of the projects currently modeled go beyond the modernization of public lighting, including monitoring and safety systems in cities, connectivity between public buildings and new services in the smart city ecosystem.

With a series of novel and updated data up to April 2025, I invite you to read the main facts that characterize the sector at the present time.

A nighttime photograph of a cityscape. In the foreground, a multi-level highway interchange is illuminated by streetlights. The lights create a warm glow against the dark blue night sky. In the background, a tall, modern building with a grid-like facade of lit windows stands prominently. The overall scene conveys a sense of urban infrastructure and modern development.

Support from the private sector to change the infrastructure situation **is a priority for the government**

Strategic ministries work together to provide resources and capacity building for municipalities to address the shortfall in the provision of essential services to improve the quality of life of Brazilians

MARKET MATURATION GIVES GREATER BALANCE TO IP BIDS

Boosting public-private partnerships as a way to face infrastructure problems in the country, the Special Secretariat for Partnerships and Investments, of the Civil House of the Presidency of the Republic (SEPPI), is very optimistic about the concession auctions for public lighting services later this year. In this interview, Marcus Cavalcanti, head of SEPPI, analyzes the market and the work that has enabled the modernization of IP systems.



Marcus Cavalcanti, holder of the Special Secretariat for Partnerships and Investments, of the Civil House of the Presidency of the Republic (SEPPI)

The total estimated investment for these projects is around R\$ 450 million

How do you see the expansion of street lighting PPPs?

PPPs have been consolidated as an important instrument to expand and qualify investments in infrastructure in Brazil to improve the provision of services to the population. SEPPI assesses that PPPs have been decisive in modernizing the country's lighting systems, involving the incorporation of technologies that allow remote monitoring of the network, identifying faults and optimizing the use of electricity, improving the efficiency in the application of resources, with a direct impact on the cost of the service for municipalities. In many municipalities, citizens can already see improvements in the first months of contractual execution. Public lighting (IP) PPPs have shown that it is possible to deliver modern, efficient, sustainable infrastructure with direct effects on the safety and quality of life of the population.

The Census on Public Lighting in Brazil shows that only 20% of the lighting fixtures in the IP system use LED technology. How does the federal government intend to address this issue?

The percentage of LED fixtures in Brazil is still below ideal, especially when compared to other countries that have already significantly advanced in the energy efficiency agenda. The Federal Government has acted strategically to ensure that

this progress is consistent, well planned and sustainable. The transfer of responsibility for public lighting from energy distributors to municipalities in 2010 created a challenge, as many municipalities, especially smaller ones, do not have the technical and financial structure to deal with the management of the street lighting network. This scenario resulted in low investment and limited maintenance, which partly explains the still low percentage of LED fixtures. However, this new configuration paved the way for the expansion of IP PPPs as a solution to fill the technical and investment capacity gap. Today, most IP PPP projects foresee the replacement of 100% of the fixtures by LED fixtures in the first years of concession, with the implementation of remote management and continuous monitoring. Therefore, although the current percentage of LED lights is still below the desired, the growth trend is clear and accelerated.

To what do you attribute the decrease in competition in IP PPP auctions?

This phenomenon can be explained by a market in consolidation and maturation. It is important to remember that in the early years there was a strong market appetite to position itself in the segment, until then a new frontier for PPPs. Investors and traders built their strategies seeking to form relevant portfolios, often accepting to undertake

additional risks to ensure a presence in the emerging market. With the consolidation of the market, the quantity of auctions increased considerably. The high volume of projects has diluted the attention and investment capacity of many players, leading to a decrease in the number of participants per auction. With the improvement of the structure of the projects and the maturation of the risk assessment by the market, the bids presented became more balanced. With this advance, modeling began to better reflect operational reality and effective risks, reducing the level of discounts offered.

What is the forecast for the IP PPP projects coming to tender this year?

SEPPI works with a positive forecast for the holding of new auctions. Only within the scope of the FEP, the projects with great potential to be licensed later this year are Gravataí (RS), Maranguape (CE), Porto Seguro (BA), Santo Antônio de Jesus (BA), São Félix do Xingu (PA), São José dos Pinhais (PR), São Pedro da Aldeia (RJ), Saquarema (RJ), Vitória de Santo Antão (PE), in addition to Consórcio Cimpajeú (PE) and Consórcio CDS Litoral Sul (BA). The total estimated investment for these projects is in the order of R\$ 450 million. This volume represents not only the technological moderation of the network, but also the implementation of a strategic infrastructure for the integration of smart city services.

MCID BETS ON FINANCING URBAN INTELLIGENCE IN A SUSTAINABLE WAY

In order to promote the growth of public lighting infrastructure with digital resources, the Ministry of Cities launched the "Cidades Melhores" (Better Cities) project. In this interview, Carlos Tomé Júnior, head of SNDUM - National Secretariat for Urban and Metropolitan Development, of MCID, states that only the creation of quality public services will reduce socioeconomic inequalities in the country.

What is the Federal Government's strategy to solve urban infrastructure problems in the country?

As the person responsible for the Brazilian policy of urban development and planning, the Ministry of Cities has encouraged the promotion of urban modernization through support for projects and works of rehabilitation, accessibility and technological modernization; support for municipal and federal urban planning and management. Through the Pro-Cities Program, it offers conditions for the formulation and implementation of local development policy based on the financing of investments presented in integrated projects to improve urban perimeters. Through the Investment Partnership

Program (PPI) of the Presidency of the Republic, the Ministry promotes investments in addition to the classic mechanisms of government financing, from partnerships with the private sector to accelerate results in cities. With the flexibilization of the use of COSIP in the Tax Reform, it becomes possible to fund, expand and improve monitoring systems for the safety and preservation of public places. This change will enable the financing of urban intelligence in a sustainable way, providing infrastructure growth, business expansion, more security for public spaces and dynamization of Brazilian-based industry.

What is the part of the IP/smart cities in the Better Cities Program?

The Federal Government understands that Brazil must use technology to solve real problems, create opportunities, offer efficient services, reduce urban inequalities, increase resilience and focus on people to improve the quality of life of Brazilians. Thus, the Better Cities Program aims to stimulate the development of territories, cities and regions, expanding the productive and urban structure, the provision of public services to reduce socioeconomic inequalities on multiple scales in the country.

Has the support to municipalities in structuring smart city projects already started?

The construction of the methodology for the selection of projects, as provided for in Decree # 12.210, from 10/03/2024, has been defined by the MCID with the PPI team. We understand that, to ensure greater effectiveness of the action, it would be important that the structure of the projects is based on local plans for digital transformation. Therefore, it has been building guidelines for all municipalities to develop their strategies. The result of this activity, which involved 19 government agencies and representatives of municipal entities, will be published soon and will serve as a basis for the selection of the 10 pilot projects to start the structures.

Do you think that the universalization of IP services is on the agenda of municipalities?

Yes, we are convinced of the importance of universalizing public lighting for all Brazilian cities, by reaffirming the role of the local government, enabling energy and environmental efficiency. As it is an initiative that increases the sense of security in public roads, it has positive environmental impacts and improves the quality of life. It is the concern of local administrators, who have been working to achieve more sustainable and fair urban development.

From the point of view of energy efficiency, the advance in the modernization of IP is still

shy. How is it possible to change this reality?

Implementing coordinated strategies of action. We have participated in and guided the initiatives of the Project Structure Support Fund (FEP) and the Sustainable Regional Infrastructure Development Fund (FDIRS) to modernize the lighting of the largest number of municipalities in the shortest period of time. Municipalities, states and public consortia can also access non-onerous resources from the General Budget of the Union, through action 00SY, at times when SNDUM opens public selection processes or through parliamentary amendments. Through the Pro-Cities, public and private providers of street lighting services can access FGTS financing resources, which operates at very attractive rates.



Carlos Tomé Júnior, Secretary

National Urban and
Metropolitan Development
Department, Ministry of
Cities

**Municipalities,
states and
consortia can
access non-
onerous from
the Union's
budget**

HALF OF THE PROJECTS APPLYING FOR BACKGROUND RESOURCES ARE FROM SMART CITIES

The public-private partnership is perceived as an integral part of state policies and PPPs for the modernization of street lighting with smart city resources are priorities for the country. In this interview, Eduardo Tavares, National Secretary of Funds and Instruments, of the Ministry of Integration and Regional Development – MIDR, talks about the Federal Government's effort to accelerate investments in urban infrastructure in this regard.



Eduardo Tavares, National Secretary of Funds and Instruments, Ministry of Integration and Regional Development - MIDR

The scale gain brings a cost-effectiveness of at least 50%

In this interview, Eduardo Tavares, National Secretary of Funds and Instruments, Ministry of Integration and Regional Development - MIDR

What is the Federal Government's goal with the Brazilian Territory Atlas for Smart City PPP?

The Government has sought to strengthen the concessions and PPPs agenda, so it is within the new PAC, which innovates by considering private investments to solve infrastructure problems. That is why the Sustainable Regional Infrastructure Development Fund (FDIRS) was created, which starts with resources of around R\$ 1 billion, within the scope of the MIDR, together with the ministries of Finance, Planning and Cities, coordinated by the Civil House, through the PPI. The aim of the FDIRS is to finance concession modeling and PPPs primarily for cities in the North, Northeast and Midwest, the most vulnerable regions of Brazil. Therefore, we took advantage of an advanced study on the potential of cities to make PPPs in a regional way prepared by the IPGC – Institute of Planning and Management of Cities to compose the Atlas. As it is very difficult for smaller municipalities to enable public lighting PPP projects and smart cities, Atlas simulates interregional arrangements for modeling and the creation of a COSIP sufficiency index to form groups that include municipalities that are not feasible to model PPP in isolation. The scale gain brings

a cost-effectiveness of at least 50%. The Atlas brings some of this provocation and places itself as another instrument with the PPP ecosystem that the government makes available to subnational entities.

What portion of FDIRS resources has already been used in PPP projects?

The four ministries chose solid waste infrastructure, drainage, mobility, housing, education, health, irrigation, forest systems, roads and smart cities as priorities. As the fund became operational in the middle of last year, we signed the first contract with CODEVASF for an irrigation PPP in the Jaíba perimeter, in Minas Gerais. We are prospecting subnational entities and we already have 180 municipalities that showed interest in the fund to model projects, half of which are smart city PPPs.

Minister Valdez Góes presented to the new mayors at the beginning of the year a proposal to make a National Consortium for PPP projects. How will this work?

The national consortium is nothing more than the possibility of making regional arrangements, in order to join municipalities by accession to reduce the individual cost of PPP projects. In the case of smart city projects, there is the possibility of sharing IP network monitoring centers,

purchase of inputs and equipment at a monthly cost. Public lighting PPP has a consolidated market, whose modeling is almost off the shelf, so we think of an Interfederativesolution already provided for in the Constitution.

How does the MIDR see the role of PPPs in driving the reduction of regional deficits?

This ministry has a very large portfolio of programs that makes it have a direct relationship with more than three thousand municipalities to support the entire range of infrastructure. We have a clear perception that public appeal alone cannot solve the country's serious problems. The public-private partnership is now perceived as an inherent part of state policies, after all, the Concessions Law has already completed 30 years. That is why Brazil is considered by the IDB – Inter-American Development Bank as a model for Latin America and the Caribbean for a favorable environment for infrastructure PPPs. The IDB's INFRASCOPE 2023/24 considers the country a more evolved market, which sees the partnership with the private sector as a mechanism to accelerate the country's infrastructure agenda. This assessment LED Brazil to be invited to the 9th International Forum of Public-Private Partnerships of UNECE – United Nations Economic Commission for Europe, in Belgrade, Serbia, to present the agenda of concessions and PPPs in infrastructure and the opportunities for private investments in the country.

IP MODERNIZATION IS FAVORED BY THE REGULATORY ENVIRONMENT

Created in 1997 with the objective of providing favorable conditions for the electricity market to develop with balance between agents and society, the National Electric Energy Agency - ANEEL regulates the relationship of electricity distributors with municipalities. In this area, ANEEL's performance was intensified in 2010 with the process of transferring the public lighting system (PI) from the distributors to the premises. The process was initiated with ANEEL's Normative Resolution (ren) 414, of 2010, improved by REN 888/2020 and 1000/2021. "These resolutions established a new regulatory framework, establishing obligations of electricity distributors, in addition to rights and obligations of municipalities as users of the



The real situation of IP systems can only be obtained by registering the municipalities themselves

Sandoval Feitosa de Araújo Neto, general-director of ANEEL

public distribution service", recalls Sandoval Feitosa de Araújo Neto, director-general of ANEEL. "The improvement of the regulatory environment provided greater security for investments in municipal systems given the growing number of modernized light points in recent years." In this way, the facilitation of the modernization of IP systems entered ANEEL's portfolio of objectives. After all, from an energy and sustainability point of view, the more modernized the system, the better for everyone.

"Among the measures are the waiver of project approval for the exchange of light fixtures for more efficient models and provisions to allow and encourage the use of telemanagement systems," says the director-general. "The normative changes also allowed the telemanagement data to be reflected in the calculation of energy consumption in place of the consumption estimate or agreement".

The fact that only 20% of the IP national system has LED technology luminaries does not surprise Sandoval Feitosa: "Maybe it is not ideal, but it was possible, and certainly the great learning of the path taken will allow us to advance faster in the coming years," he says. The agency has been working permanently on the improvement of the information collected from the energy distributors in the BDGD – Geographic Data Base of the Distributor, whose data were the basis of the Public Lighting Census – based on ABCIP, 2023. Sandoval also considers that "the real situation of the IP systems can only be obtained with the registration of the municipalities themselves".



Current Portrait of Street Lighting

The impact on the quality of life of Brazilians and on the accounts of municipalities can be attributed

to the vigorous growth of the modernization of IP systems through PPP. In just one year there were 40 bids, causing 27% of the population to be served by private providers

CONTRACTS

146

MUNICIPALITIES

173

POPULATION

57 MILLION

POINTS OF LIGHT

5 MILLION

VALUE OF CONTRACTS

32 BILLION

City	provider	Population	Points of light	Value of the contract (in R\$ million)
Açailândia (MA)	Luz de Açailândia	113,121	12,780	303.83
Água Boa (MT)	ARC Água Boa Iluminação	26,204	3,800	46.51
Água Branca (PI)	Concip Água Branca	17,470	2,196	31.62
Agudos (SP)	Luz de Agudos	37,582	6,003	44.05
Alagoinhas (BA)	Luz de Alagoinhas	151,065	20,000	58.58
Albertina (MG)	Smart CGPI	2,913	316	2.70
Almeirim (PA)	Infinity Almeirim Energy	34,076	3,638	74.82
Anapu (PA)	Concip Anapu	28,607	2,470	24.09
Andradas (MG)	Smart CGPI	40,706	4,940	3.60
Angical (PI)	Cidade Inteligente Angical	6,779	1,105	23.88
Angra dos Reis (RJ)	Luz de Angra	207,044	20,839	59.00
Aparecida de Goiânia (GO)	Luz Pública de Aparecida	601,844	46,023	581.00
Aracaju (SE)	Conecta Aracaju	664,908	58,983	256.95
Araçatuba (SP)	Luzes de Araçatuba	199,210	30,000	77.00
Araguari (MG)	Ilumina Araguari	118,361	15,583	58.32
Aramina (SP)	Luz da Alta Mogiana	5,420	1,120	11.62
Ariquemes (RO)	CONCIP ARIQUEMES	96,833	11,447	70.57
Bandeira do Sul (MG)	Smart CGPI	5,713	729	6.30
Barbacena (MG)	Concip Barbacena	139,061	13,861	165.28
Barra do Corda (MA)	Corda Luz	88,492	7,530	77.07
Barra do Garças (MT)	Barra Luz	61,135	12,000	119.11
Barra do Pirai (RJ)	Luz do Vale	100,764	9,000	128.25
Barreiras (BA)	Smart Lux Barreiras	159,743	20,331	44.94
Barretos (SP)	Barretos Inteligente	123,546	23,615	226.00
Batatais (SP)	Luz da Alta Mogiana	58,402	9,494	98.50
Baturité (CE)	Urbantech	35,218	3,874	79.50
Belém (PA)	Luz de Belém II	1,499,641	90,000	458.54
Belo Horizonte (MG)	BH Iluminação Pública	2,521,564	182,000	991.78
Brasília (DF)	CEB IPES	3,094,325	360,000	3,330.00

City	Provider	Population	Points of light	Value of the contract (in R\$ million)
Buritizal (SP)	Luz da Alta Mogiana	4,356	860	8.91
Cachoeiro de Itapemirim (ES)	Luz de Itapemirim	210,589	18,556	38.73
Caieiras (SP)	Caieiras Luz	102,775	13,228	54.68
Caldas (MG)	Smart CGPI	13,630	1,852	9.02
Campinas (SP)	Conecta Campinas	1,204,073	122,000	211.88
Campo Belo (MG)	Cidade Inteligente Campo Belo	54,186	7,244	38.25
Campo Maior (PI)	Concip Campo Maior	46,893	5,000	47.53
Campos do Jordão (SP)	Campos Luz Iluminação	52,713	6,578	31.82
Canoas (RS)	IP Canoas	349,728	35,314	137.32
Capela (SE)	Capela Solar	34,808	3,164	147.38
Caraguatatuba (SP)	Caragua Luz	123,389	19,987	198.51
Carmo do Cajuru (MG)	MG1 Iluminação	22,693	4,700	61.37
Carmo do Paranaíba (MG)	CONCIP Carmo do Paranaíba	30,339	2,758	74.25
Caruaru (PE)	Luz de Caruaru	369,343	34,000	90.26
Castelo do Piauí (PI)	Concip Castelo do Piauí	19,716	2,126	29.61
Cataguases (MG)	Luz de Cataguases	75,942	7,871	63.76
Catanduva (SP)	FB Luz	123,114	14,628	131.89
Caxias do Sul (RS)	Luz de Caxias do Sul	523,716	49,260	178.44
Cianorte (PR)	Concip Cianorte	84,980	7,225	25.58
Colônia do Piauí (PI)	Colônia Luz	6,991	636	13.19
Confresa (MT)	Ilumina Confresa	32,076	7,437	59.79
Corumbá (MS)	Concip Corumbá	112,669	12,047	63.49
Cosmópolis (SP)	Cosmópolis Luz	74,662	9,560	116.20
Cotia (SP)	Ilumina Cotia	257,882	23,444	358.57
Curitiba (PR)	Engie Soluções	1,773,733	163,000	292.75
Demerval Lobão (PI)	Demerval Luz	16,352	1,487	28.50
Divisa Nova (MG)	Smart CGPI	6,068	1,063	6.30
Dom Eliseu (PA)	Concip Dom Eliseu	60,469	3,100	53.24
Dores do Indaiá (MG)	Concip Dores do Indaiá	13,373	1,438	26.05

City	Provider	Population	Points of light	Value of the contract (in R\$ million)
Fazenda Rio Grande (PR)	Stylux Greentech	148,873	11,000	64.58
Feira de Santana (BA)	Conecta Feira	619,609	61,000	122.85
Fernandes Pinheiro (PR)	Ilumina Conder	5,561	626	3.37
Forquilha (CE)	Forquilha Luz	24,680	3,903	32.79
Foz do Iguaçu (PR)	Foz Iluminada	257,971	30,398	113.59
Franco da Rocha (SP)	Luz de Franco	156,492	10,413	58.00
Garopaba (SC)	Qluz Garopaba	29,959	7,040	116.70
Goianesia (GO)	C. O Energia Solar	72,045	6,550	106.76
Goianésia do Pará (PA)	Tellus Mater Brasil	41,081	2,200	22.33
Goiânia (GO)	Brilha Goiânia	1,555,626	179,000	1,415.10
Governador Eugenio Barros (MA)	GEB Luz	14,703	1,337	14.03
Graça Aranha (MA)	Graça Aranha Luz	6,261	931	12.97
Grajaú (MA)	Grajaú Luz	70,692	6,427	144.96
Guanambi (BA)	CONCIP Alto Sertão	87,917	15,448	154.48
Guarapuava (PR)	Ilumina Guarapuava	182,644	23,874	131.00
Guaratuba (PR)	Guaraluz	37,527	6,400	59.97
Guarulhos (SP)	Guarulhos Luz	1,404,694	73,073	420.00
Hortolândia (SP)	Ilumina Hortolândia	234,259	24,479	227.38
Humberto de Campos (MA)	Campos Luz	29,143	2,649	24.28
Ibirité (MG)	Ibirité IP	182,153	18,541	79.54
Ibitiura de Minas (MG)	Smart CGPI	3,406	399	8.10
Içara (SC)	Ilumina Içara	58,055	7,937	77.60
Icatu (MA)	Icatu Luz	27,423	2,493	19.77
Igarapava (SP)	CONCIP Igarapava	30,614	3,807	33.68
Inácio Martins (PR)	Ilumina Conder	11,117	840	4.48
Ipuiuna (MG)	Smart CGPI	10,079	842	38.72
Irati (PR)	Ilumina Conder	61,439	9,975	53.26
Itajaí (SC)	QLuz Itajaí	226,617	22,151	467.46
Itanhaém (SP)	Luz de Itanhaém	104,351	10,582	59.83

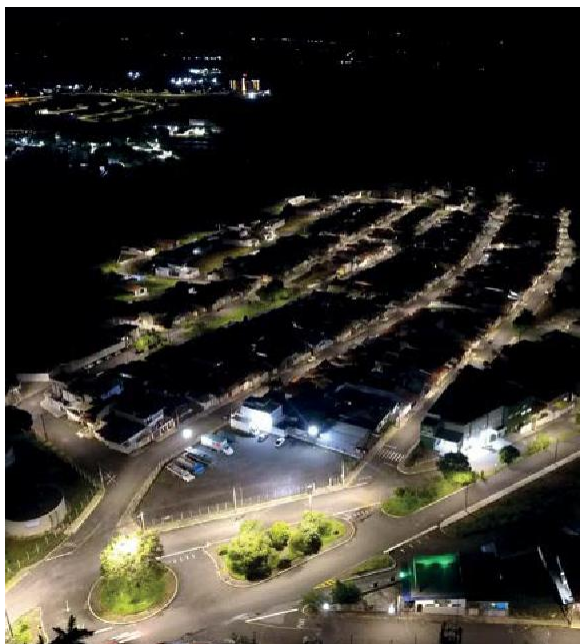
City	Provider	Population	Points of light	Value of the contract (in R\$ million)
Itapecerica da Serra (SP)	Ilumina Itapecerica da Serra	158,522	14,411	130.32
Itatiba (SP)	Ilumina Itatiba	124,254	16,000	65.40
Ituverava (SP)	Luz da Alta Mogiana	37,571	7,099	73.63
Jaboatao dos Guararapes (PE)	Luz de Jaboatão	706,867	46,742	130.81
Jaboticabal (SP)	Luz de Jaboticabal	78,029	14,000	102.00
Jaraguá (GO)	Jaraguá Luz	52,160	4,741	56.13
Jardinópolis (SP)	Luz da Alta Mogiana	45,544	8,166	84.70
Jatobá (MA)	Jatobá Luz	10,464	1,002	15.87
Jeriquara (SP)	Luz da Alta Mogiana	3,863	581	6.00
Joinville (SC)	Qluz Joinville	613,317	58,310	399.00
Lagoa Real (BA)	CONCIP Alto Sertão	14,105	1,650	18.81
Laranjeiras (SE)	Laranjeiras Solar	23,975	2,180	113.78
Mairiporã (SP)	Brilha Mairiporã	320,697	29,154	153.20
Mallet (PR)	Ilumina Conder	13,697	2,056	11.03
Manacapuru (AM)	WF Serviços Elétricos	169,041	15,367	41.20
Manaus (AM)	Manaus Luz	2,219,580	129,527	922.00
Maringá (PR)	Luz de Maringá	436,472	39,797	81.00
Mauá (SP)	Mauá Luz	477,552	45,752	352.95
Miguel Pereira (RJ)	Miguel Pereira Luz	25,581	6,300	68.70
Miguelópolis (SP)	Luz da Alta Mogiana	19,441	3,974	41.22
Miranda do Norte (MA)	CONCIP Miranda do Norte	23,864	2,169	25.48
Mogeiro (PB)	C. O Energia Solar	13,238	1,235	30.18
Morro Agudo (SP)	Luz da Alta Mogiana	27,933	4,733	49.10
Nova Lima (MG)	Nova Lima Iluminação Pública	97,378	19,000	59.90
Nova Serrana (MG)	Q Luz Nova Serrana	108,241	12,120	65.98
Nuporanga (SP)	Luz da Alta Mogiana	7,391	1,689	17.52
Oeiras (PI)	Oeiras Luz	37,138	4,084	51.84
Olinda (PE)	Brilha Olinda	349,976	26,600	52.20
Orlândia (SP)	Iluminar Orlândia	38,319	11,092	92.84

City	Provider	Population	Points of light	Value of the contract (in R\$ million)
Ouro Preto (MG)	Ouro Preto Luz	74,824	11,868	58.03
Palhoça (SC)	Qluz Concessionária de Iluminação Pública	175,272	17,814	187.83
Palotina (PR)	Ilumina Palotina	35,011	6,372	67.45
Patos de Minas (MG)	Ilumina Patos	154,641	25,498	47.17
Patrocínio Paulista (SP)	Luz da Alta Mogiana	14,488	2,158	22.40
Pederneiras (SP)	Luz de Pederneiras	47,111	7,500	34.38
Pedregulho (SP)	Luz da Alta Mogiana	15,525	3,153	32.70
Pedro II (PI)	Pedro II IP	37,894	3,444	48.00
Penha (SC)	Qluz Penha	34,022	6,879	160.11
Petrolina (PE)	Engie Soluções	354,317	36,000	95.34
Poconé (MT)	Cidade Inteligente de Poconé	31,217	2,838	73.13
Ponta Gossa (PR)	Luz de Ponta Grossa	358,838	35,292	84.46
Porto (PI)	Concip Porto	12,608	1,313	17.17
Porto Alegre (RS)	IP Sul	1,488,252	101,487	403.10
Posse (GO)	Cidade Inteligente de Posse	34,914	4,820	83.03
Presidente Dutra (MA)	Dutra Luz	48,036	5,057	64.76
Presidente Prudente (SP)	Prudente Smart	225,668	42,032	62.00
Rebouças (PR)	Ilumina Conder	14,991	1,505	8.10
Restinga (SP)	Luz da Alta Mogiana	6,404	834	8.65
Ribeirão das Neves (MG)	IP Minas	338,197	26,486	258.43
Ribeirão Preto (SP)	Conecta Ribeirão	698,259	80,000	167.20
Rio de Janeiro (RJ)	Smart Luz	6,747,815	450,000	1,409.79
Rio Negro (PR)	RN Ilumina	31,324	2,848	38.19
Sales Oliveira (SP)	Luz da Alta Mogiana	11,411	2,190	22.71
Santa Luzia (MG)	Concip Santa Luzia	221,705	22,386	300.53
Santa Maria (RS)	IP Santa Maria	271,735	28,000	219.67
Santa Rita de Caldas (MG)	Smart CGPI	9,027	981	15.31
Santana (AP)	Concip Santana	107,618	8,212	152.85
Santo Amaro (BA)	S/A Montagem e Instalação de Equipamentos de Iluminação	60,131	7,191	102.77

City	Provider	Population	Points of light	Value of the contract (in R\$ million)
São João de Meriti (RJ)	Alegrete RJ Participações	472,906	33,086	466.83
São José da Bela Vista (SP)	Luz da Alta Mogiana	7,626	999	10.36
São José de Ribamar (MA)	SJR Iluminação do Futuro	179,028	26,000	127.49
São José dos Basílios (MA)	Basílios Luz	7,639	928	26.08
São Manuel (SP)	Luz de São Manuel	41,287	6,853	33.80
São Paulo (SP)	Iluminação Paulistana	12,325,232	635,000	6,936.84
São Vicente (SP)	Novaluz de São Vicente	370,839	31,000	158.89
Sapiranga (RS)	IP Sapiranga	82,000	10,661	104.00
Sapucaia do Sul (RS)	Ilumina Sapucaia do Sul	141,808	13,000	30.62
Senador Alexandre Costa (MA)	Alexandre Luz	11,285	1,026	18.77
Serrana (SP)	Luz da Alta Mogiana	46,166	5,011	51.98
Serro (MG)	Concip UFV Serro	21,952	2,288	49.68
Socorro (SP)	Ilumina Socorro	41,690	68,754	40.79
Soure (PA)	Iluminação Pública Soure	25,752	2,340	36.00
Sumaré (SP)	Ilumina Sumaré	289,875	26,352	165.55
Suzano (SP)	Ilumina Suzano	303,397	27,582	305.10
Teixeira de Freitas (BA)	Teixeira Luz	164,290	14,935	64.53
Teixeira Soares (PR)	Ilumina Conder	12,761	1,107	5.95
Teresina (PI)	Teresina Luz	871,126	87,000	418.88
Timbó (SC)	Farol do Vale Engenharia	44,977	7,046	29.11
ToLEDo (PR)	Ilumina ToLEDo	144,601	24,274	47.28
Tomé Açu (PA)	Concip Tomé Açu	64,030	4,300	78.52
Três Lagoas (MS)	Consórcio Ilumina Três Lagoas	125,137	21,694	40.53
Uberaba (MG)	Concip Uberaba	337,092	49,500	336.33
Uberlândia (MG)	Engie Soluções de Uberlândia	699,097	85,000	251.36
União da Vitória (PR)	IP Foco	58,298	6,154	109.56
Vassouras (RJ)	Vassouras Luz Imperial	33,976	3,387	63.00
Vila Velha (ES)	SRE-IP Vila Velha	501,325	35,000	120.24
		57,076,653	4,801,521	31,824.36

CONSORTIA BETWEEN SMALLER MUNICIPALITIES BEGIN TO PRESENT RESULTS

The new fact is the good performance of public consortia between municipalities: four are in full operation to serve 624 thousand inhabitants of 31 cities in Bahia, Minas Gerais, Paraná and São Paulo and had access to quality public lighting, they are:



CONSÓRCIO CPGI - MG

PROVIDER: Smart CPGI

Municipalities	Population	Points of light
Albertina	2,913	316
Andradas	40,706	4,940
Bandeira do Sul	5,713	729
Caldas	13,630	1,852
Divisa Nova	6,068	1,063
Ibitiura de Minas	3,406	399
Ipuiuna	10,079	981
Santa Rita de Caldas	8,900	809
	91,415	11,089

CONDER - PR

PROVIDER: Ilumina CONDER

Municipalities	Population	Points of light
Fernandes Pinheiro	5,561	626
Inácio Martins	11,117	840
Irati	61,439	9,975
Mallet	13,697	2,056
Rebouças	14,991	1,505
Teixeira Soares	12,761	1,107
	119,566	16,109

CONSÓRCIO LUZ DO BRASIL

Provider: Luz da Alta Mogiana

Municipalities	Population	Points of light
Aramina	5,420	1,120
Batatais	58,402	9,494
Buritizal	4,356	860
Ituverava	37,571	7,099
Jardinópolis	45,544	8,166
Jeriquara	3,863	581
Miguelópolis	19,441	3,974
Morro Agudo	27,933	4,733
Nuporanga	7,391	1,689
Patrocínio Paulista	14,488	2,158
Pedregulho	15,525	3,153
Restinga	6,404	834
Sales Oliveira	11,411	2,190
S. José Bela Vista	7,626	999
Serrana	46,166	5,011
	311,541	52,061

CONSÓRCIO ALTO SERTÃO - BA

Provider: CONCIP Alto Sertão

Municipalities	Population	Points of light
Guanambi	87,817	15,448
Lagoa Real	10,326	5
	101,922	17,098



ONGOING PROJECTS

The PPP alternative to offer quality public lighting for the population continues to be an important agenda in the municipalities' infrastructure agenda. Leading

the rank of IP PPP projects is the State of Minas Gerais (with 168 municipalities), followed by Bahia (115), São Paulo (71) and Rio Grande do Sul (66).

PROJECTS

812

POPULATION

61 MILLION

POINTS OF LIGHT

6 MILLION



State	
Acre	1
Alagoas	3
Amazonas	3
Bahia	115
Ceará	22
Espírito Santo	28
Goiás	13
Maranhão	21
Mato Grosso	18
Mato Grosso do Sul	1
Minas Gerais	168
Pará	15
Paraíba	2
Paraná	48
Pernambuco	52
Piauí	15
Rio de Janeiro	29
Rio Grande do Norte	50
Rio Grande do Sul	66
Rondônia	3
Roraima	1
Santa Catarina	56
São Paulo	71
Sergipe	8
Tocantins	3
	812

SMART CITIES WILL BRING NEW INVESTMENTS TO THE SECTOR

After ten years of public-private partnerships in public lighting, the inclusion of smart city devices is increasingly being discussed by the market. The promise of smart city services that, at first, would be attractive revenues for the provision of IP services, did not materialize as imagined, causing frustration and casting doubt on whether smart cities could become a reality. From this reflection, more sophisticated models were conceived, in which smart city resources were already incorporated into the very scope of IP PPPs.



Vanessa Rosa is the legal director of ABCIP and a partner at Lacaz Martins, Pereira Neto, Gurevich & Schoueri Advogados

The incentive for this modeling with new contacts arises with the innovation brought by the Tax Reform on the uses of COSIP, in which the municipal tax is no longer intended only to improve the public lighting service, but also the monitoring system for safety and preservation of public places.

Taking into account that in many municipalities COSIP is a surplus, the change has opened new doors for smart cities, since services for safety and preservation of public places can be amplified depending on the point of view adopted.

Thus, the incorporation of smart city services in PPP models has already been absorbed by PPP project developers. So much so that it is known that the Ministry of Cities will publish a resolution to deal with digital activities and services that may be funded by the new COSIP. Having clarified these details about the use of the tax, it is certain that future PPP projects will bring important innovations in their contours and modeling, which has the potential to bring new business and investments to the sector.

In any case, it should not be forgotten that the COSIP was originally created for the costing and improvement of public lighting, a purpose to be met and maintained. Public services and innovations in smart cities should coexist, with sustainability for both and gains for the government, the market and the population.

IP IS STRATEGIC FOR CONNECTED CITIES

The modernization of street lighting has emerged as one of the ways to catalyze sustainable and digital urban transformation. Historically treated as an ancillary function, IP started to occupy a strategic role from the compulsory transfer of assets to local entities by ANEEL Resolution 414/2010. It presented a challenging scenario: most municipalities received obsolete systems, without updated inventories and operational or budgetary capacity. To overcome these restrictions, PPPs emerged as an alternative to enable modernization without complying with the municipalities' already limited fiscal capacity, allowing the replacement of fixtures with LED technology, installation of remote management, coverage of deprecated areas and implementation of digital devices.

However, the absence of consolidated information and reliable records on the real situation of the IP



Manoel Renato Filho is assistant secretary of the Special Secretariat of the Investment Partnership Program of the Civil House of the Presidency of the Republic (SEPPI)

system poses a risk to contract modeling. Without insurance, the projection of goals and indicators can lead to imbalances and legal uncertainty, which may explain the high mortality rate of IP PPP projects in their early stages, since the reality found by the private partner contrasted with the previous diagnosis.

Aware of this gap, SEPPI has acted to structure a more qualified and safe environment for the expansion of the sector. The support of the Project Structuring Fund (FEP) and coordinated action with public banks and consultancy agencies made the number of contracts jump from 17 in 2019 to 146 in 2025, serving more than 170 municipalities. This progress has been driven by the adoption of good practices, such as the elaboration of accurate inventions, georeferencing of IP points and the active appropriation of system management by municipalities. Even so, there remains the need to build a more consolidated national base on the IP situation for risk mitigation in the next concession cycles.

On the other hand, the opportunity presented is historical. With more than 80% of the lighting system still without LEDs, there is space for hundreds of new PPP projects. The expansion of the use of COSIP, enabling digital and connectivity services, makes IP a platform for the development of smart cities. For public managers, this means the chance to transform a traditional service into a vector of innovation, modernization and appreciation of public spaces, promoting a sense of security and citizen inclusion.



Financial institutions invest in **improving** **street lighting**

Urban street lighting infrastructure and smart cities are increasingly attracting public banks. In structuring lighting PPP projects, they joined CAIXA ECONÔMICA FEDERAL, BANDES – Banco de Desenvolvimento do Estado do Espírito Santo, BRDE – Banco Regional de Desenvolvimento do Extremo Sul and BNB – Banco do Nordeste.

Banco do Brasil, on the other hand, invests heavily in the qualification of public agents in

public services concessions aiming to strengthen the ecosystem of public-private partnerships

CAIXA OPENS NEW SOURCE TO FUND PUBLIC LIGHTING PPP PROJECTS

Of the 82 PPP projects that CAIXA has in its portfolio, 60% regard public lighting, so the expectation that by the end of the year at least 10 will reach the bidding, says Denis Mendes de Melo Matias, National Manager of Development of Partnerships and Special Services for Government, CAIXA ECONÔMICA FEDERAL, which has already managed to take 25 projects to auction. Considering this scenario, the direct contracting modality was created, outside the EFF - Fund to Support the Structure of Concession Projects and PPP. "The municipalities that have used the resources of the FEP are being prioritized, but we will build a structure capable of supporting



Denis Mendes de Melo Matias,
National Manager of Development of
Partnerships and Special Services for
Government, CAIXA

Municipal consortia are part of our day-to-day activities

any other municipality deemed feasible". This year, three IP projects have already been contracted and 10 others are under negotiation. "CAIXA has a very robust technical structure in the legal, economic, and financial spheres. We count on over two thousand engineers, because we work in all programs of the Federal Government". The condition for accessing this modality is the technical feasibility and operational capacity of the municipality, informs Matias.

One of the priorities today is to support consortia. "We were successful with Alto Sertão (BA) and CONDER (PR), and we have three others in our IP portfolio", says the CAIXA manager. The ability to dialogue with the municipalities is key to working well on consortium projects. "They are part of our daily lives, in the area of sanitation, early childhood education, etc. Our team is used to dealing with city halls, perhaps this is the main difference".

With the flexibilization of the use of COSIP by the tax reform, the FEP will also be able to finance projects that include smart city resources. "CAIXA already considers some resources that are easily framed as telemanagement and operational control centers", informs Matias. However, not all PPP projects include 100% telemanagement of the IP system, which brings energy efficiency gains and the possibility of remote maintenance, because, according to Matias, it incorporates an additional cost that may not fit the reality of the municipality or does not justify the implementation in areas of low flow, such as rural areas.

BANCO DO BRASIL INVESTS IN QUALIFICATION

The creation of new models to issue and administer guarantees in contracts between the public and private sectors and to foster the training of public agents in concessions and PPPs was the way that Banco do Brasil chose to contribute to the strengthening of the ecosystem of public-private partnerships (PPPs) and concessions in the country.

"We have already trained more than a hundred servers with certification 100% sponsored by Banco do Brasil," says Leiner Jean Bastos, Solutions Manager at the Strategic Government Unit. "We offer short and medium-term MBA courses, but the idea is also to make master's and doctorate courses available to provide



Leiner Jean Bastos, Solutions Manager of Banco do Brasil's Strategic Government Unit

Over 100 graduates in partnership with prestigious institutions

concessions sustainable from the economic-financial, legal and management perspectives".

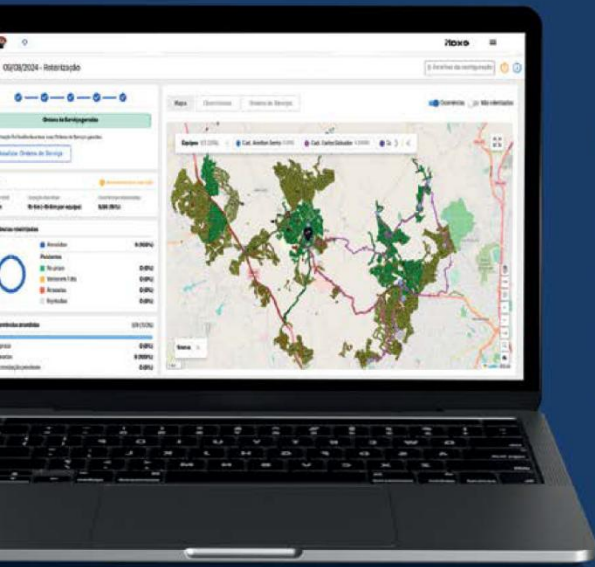
In partnership with educational institutions such as FGV, Insper and FESP, the professional qualification of civil servants is being made possible thanks to Ordinance 808/2023, of the Ministry of Finance, informs the manager of Banco do Brasil. "The ordinance conditions the granting of guarantees in credit operations contracted by the States, Federal District and municipalities to the counterpart equivalent to 0.5% for the improvement of fiscal management, in the training of professionals in fiscal management and in the structuring of PPP projects and concessions of subnational entities".

By the Ordinance, the measure has the potential to direct, by 2026, about R\$ 500 million to financial institutions' counterparts, enough to enable the structuring of more than 150 PPP projects in the area of infrastructure, including street lighting. As the funds return after signing the contract, each year there will be more resources for structuring projects.

As they are fundamental for PPP and public service concession contracts, the administration of guarantees that was already being worked on by BB gained new impetus. "We are developing other solutions, with the use of FUNDEB as a part to compose guarantees in education PPPs, for example", says the manager. "Another novelty is to offer a credit operation with the guarantee of the Federal Government that can be used both for contribution and for payment of counterpart of PPPs and concessions".

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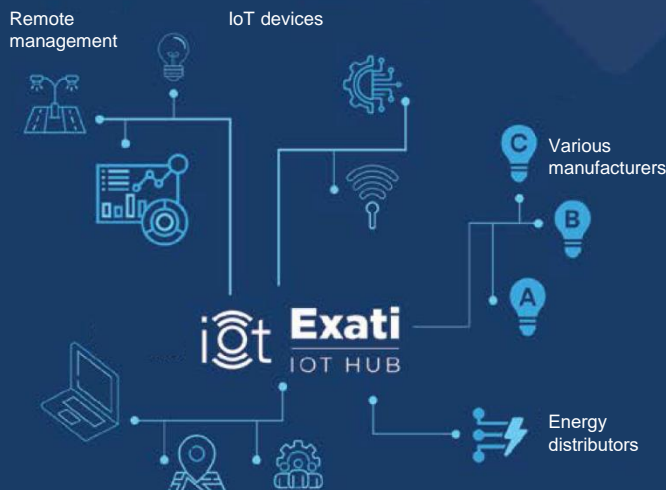


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- ❖ Return on your investment of more than 10x

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- ❖ Unified dashboards and reports



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(with history and guarantee of each fixture)



Integrated, off-the-shelf dashboards

(doesn't tools from 81 external)



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- ❖ Curitiba - 185 thousand points
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NEARLY 35% OF THE CITIES IN ESPÍRITO SANTO WANT TO BECOME SMART CITIES

Since 2021, Banco de Desenvolvimento do Espírito Santo – BANDES has been working to support the structure of PPP projects in the 78 municipalities of Espírito Santo, through the ES Inteligente program. "As a structure of State PPPs, BANDES has in its portfolio 25 municipalities with smart city projects, 23 of which include the modernization of the public lighting system," says Marcio Kneip Navarro, director of Business at BANDES. "We were able to model an arrangement that combines efficiency of the IP system, telemanagement of the network, renewable energy generation in public buildings, video monitoring and free WiFi".



Marcos Kneip Navarro, BANDES Business Director

Private dealers will have a credit line with below-market interest

The structuring of smart city PPP projects has zero cost for municipalities until it reaches the bidding process. "This helped a lot to scale the program, so much so that we are already in almost 35% of the state. The projects have already benefited three million people", says Navarro. To avoid wasting time and rework, the studies are submitted to the State Audit Court before the publication of the notice. "This measure guarantees more legal security for those interested in participating in the PPP, after all, they are 25-year contracts," says the director of BANDES. The strategy of Banco Capixaba is to serve especially smaller municipalities. "The vast majority of our municipalities have less than 50,000 inhabitants, and many of them have never made a PPP due to the cost or interest of financial institutions," says Navarro. "We are talking now, for example, with Anchieta, a city with less than 33 thousand inhabitants".

The volume of resources of the ES Inteligente program used for project structuring is around R\$ 30 million. "In this first phase we must serve up to 30 municipalities". The next step for BANDES is to offer financing for investment in smart city services to the private providers. "We are creating a specific line for this type of credit with an interest rate below those offered by the market, since, for us, the PPP contract resembles the direct contract with the public administration, that is, the risk is very calculated," concludes the BANDES executive.

SOUTHERN CITIES BEGIN TO SEE IP PPP AS A MANAGEMENT TOOL

The cities of Santa Maria and Sapiranga are modernizing public lighting through private public participation thanks to the support of BRDE – Banco Regional de Desenvolvimento do Extremo Sul, which operates in Paraná, Rio Grande do Sul and Santa Catarina (encompassing 31 million inhabitants), for which it assumed the role of technical advisor to the municipalities in structuring public lighting PPPs.

"Finally, mayors understand the partnership with the private sector as a public management tool," says Leonardo Maranhão Busatto, Director of Planning,



Leonardo Maranhão Busatto,
Planning Director, BRD

The challenge now is to harness resources from smart cities to lighting

BRDE, which already has a technical cooperation agreement to structure IP PPP projects with the municipalities of Tramandaí, Viamão, Lajeado, Farroupilha and Alvorada (RS), Balneário Camboriuú, Balneário Piçarras, Blumenau, Itajaí, Mafra and São Bento do Sul (SC) this year. "Our proposal is to reach two bids later this year, but it may take a while since the State Audit Courts have taken at least 90 days to examine the notices." In parallel, BRDE has lines to finance public services through resources from the FGTS – Guarantee Fund for Time of Service within the limit of R\$ 500 million. "And as the largest partner of the AFD - French Development Agency in financing projects related to the energy transition, BRDE can access funds equivalent to R\$ 800 million to finance, for example, city halls in the exchange of traditional lighting for LED or CAPEX of IP providers", informs the principal.

The will to implement digital resources of smart cities – monitoring cameras, free wifi, climate sensors, etc. - LED BRDE to rethink its IP PPP modeling projects. "Our first bidding process was focused on IP and remote management. The challenge now was to include other smart city activities linked to public lighting in the public notices as the municipal government wants." The issue now, according to Busatto, is to make these resources fit within the COSIP collection by the municipality, which, with the tax reform, may have its application made more flexible in the near future.

BANCO DO NORDESTE PREPARES TO STRUCTURE IP PPP

Like other regional development banks, Banco do Nordeste (BNB) is preparing to support the structuring of public lighting PPP projects and smart cities for the semi-arid region, which encompasses almost 1,500 municipalities and 31 million inhabitants in nine states.

For this purpose, it is implementing the PPP and Concessions Projects Modeling Unit with the assistance of the PPI – Partnership and Investment Program of the Federal Government, to finance projects with funds from the FEP (Project Structuring Support Fund). "In 2022, the FEP selected 38 municipalities for the bank's area of action specifically to study projects involving



customer Superintendent
Government

José Hailton Fortes,

IP PPP", says the BNB Government Customer Deputy, Hailton José Fortes. "Part of these municipalities may be served by the unit next year". The phase to define the city that will serve as a pilot project is

advanced. "Pre-selected was the

municipalities of the states of Bahia, Pernambuco, Maranhão and Ceará", says Fortes. "The resources for the projects will be supported by multilateral partners, as well as by the Northeast Region Productive Development

Program (Prodepro), through loan signed with the IDB – Inter-American Development Bank".

IP concessions have used BNB to finance their investments, informs Emiliano Portela, Wholesale superintendent of the bank. "We finance the municipalities of Fortaleza, Baturité (CE), Petrolina (PE) and Barreiras (BA). The credit for the concessions of Caruaru and Jaboatão dos Guararapes (PE) is under analysis". According to Portela, the demand for credit for the modernization of public lighting systems has been growing in the region. "It is in the interest of the bank to support the provision of public lighting services due to the improvement of the quality of life in cities, especially including public safety. We have resources available to serve municipalities with good terms and interest rate definitions operating with the FNE

- Constitutional Financing Fund for the Northeast, our main funding."



Emiliano Portela,
BnB Wholesale
Superintendent

THE CHALLENGES FOR SMART CITIES IN THE COUNTRY

The public lighting systems of more than 170 municipalities are being operated and modernized by private utilities, promoting the replacement of obsolete technologies with LED systems, with energy gains and improvements visible to the population. While the IP national system has coverage of only 20% of LED fixtures, 53% of those operated in the PPP model have 100%, according to a survey with providers, carried out by the Vox Populi Institute for ABCIP in 2024.

Despite the advances, the study reveals that only 6.7% of IP concessions exploit ancillary revenues and, even among these, services are still unrepresentative: only 33% of contracts include



Marcelo Menegatto is Chief Technology Officer of ABCIP and CEO of BHIP

Only 6.7% of IP concessions exploit ancillary revenues

video-monitoring cameras and 67%, telecommunication services, which highlights the difficulty of the service in obtaining approval for this type of initiative with the managers of the municipalities. The expectation of ancillary revenues that have not materialized has placed several concessions in delicate situations, affecting programs and essential services such as maintenance and modernization of the network.

From a technical point of view, two recent advances highlight paths to greater efficiency. The update of ABNT NBR 5101:2024 redefines criteria for the classification of roads and lighting projects, requiring operational and contractual adjustments. The INMETRO 221/2022 ordinance, on the other hand, opens the way for the undivided measurement of fixture consumption, which allows strategies such as dimerization, fundamental for the viability of large-scale telemanagement.

Still, the main obstacle to the advancement of PPPs to boost smart cities is the absence of a clear regulatory framework. The lack of specific rules generates legal uncertainty, halting investments and inhibiting innovations by public managers.

International experiences show that it is possible to transform lighting into a vector of efficiency and innovation. With contractual adjustments, independent verifiers and legal certainty, Brazil can stand up to the challenges and opportunities that will improve the quality of life of the population.

Growing competition in the industry of components and systems



INDUSTRY SUPPLY CHAIN CELEBRATES HIGH SALES

The explosion of interest of municipal public managers in smart cities and the vigor of the market for PPPs for public lighting services has intensified the competition in the industry of components and systems for IP systems. In addition to the entry of new players from other sectors, specialized foreign companies in technology are looking closely at Brazil. On the chain side, the suppliers of the public lighting chain celebrate the growth of billing.

This is the case of SmartGreen, a company specialized in telemanagement of street lighting networks, which registered a 50% increase in sales in 2024. With more than 60 municipalities in its customer portfolio, the company ensures that 450,000 light points use its remote management. "Thanks to the expansion of IP concessions, which has driven the adoption of technology on a large scale, so much so that Brazil is among the largest operators of this type of system in the world," says Laércio Brígido, SmartGreen's Commercial Manager.

**Brazil is among the
largest in the world
in the application of
telemanagement**

Felipe Fulgêncio, CEO of M2M Telemetria, also considers the country one of the most advanced in telemanagement in the world, and credits this status with the strong impact on its sales. "The M2M telemanagement system was responsible for revenue growth of 400% between 2022 and 2024", says the executive. "The regulations in the sector are creating a very favorable environment for the expansion of the industry of intelligent components and control systems for public lighting networks." Therefore, the company is developing new products to launch later this year. "Cameras and sensors for smart cities are being incorporated into our line".

EXATI Tecnologia, specialized in city management software, is another company that credits IP PPPs with a 48% growth in sales. "The notices are getting increasingly demanding regarding the quantity and quality of digital resources added to the modernization of the systems", explains Rogério de Oliveira, the company's Business Director. Present in the systems of about 700 Brazilian cities, EXATI exports digital solutions to companies in Chile, Colombia and Mexico. To meet market expectations, the company launches new products in 2024: "The Exati AI Route Planner tool uses artificial intelligence to optimize the routing of teams in public lighting management",



says Oliveira. Another novelty is the IoT Hub, a solution to centralize and manage IoT and remote management devices from different suppliers in a single system. "This integration makes operations more efficient in accordance with contracts, with freedom in choosing suppliers and access to complete and updated reports," says the director of EXATI.

For 15 years in the market, KDL Lighting has telemanagement systems installed in 600 thousand points of light to improve the energetic efficiency in the IP systems

including those in the cities of Guarulhos, Santo André, São Caetano and São Paulo.

"Even though it was an atypical year, because of the municipal elections and adaptation to the INMETRO standard, which requires the approval of products, it was a good year for the company," says Klaus Lacher, CEO of KDL. But it can improve with the popularization of smart cities: "After all, the remote management of IP networks is the starting point for the implementation of smart city resources in systems."



Focused on solving connectivity problems to enable smart ecosystems, Nouvenn do Brasil provides IP telemanagement solutions for more than 20 Brazilian municipalities. The increase in sales by a threefold since 2023 has LED the company to invest more in innovation. "Our goal is to work to make cities more intelligent, technological and safe," says Nilson Tanji, Commercial Director of the company. "We already had the RF Mesh communication solution and now we offer NB-IoT, which can be deployed alone or hybridly in a single

project, ensuring the best performance, according to the availability of connectivity coverage".

Constanta/Nexum, another company specializing in remote management systems for street lighting that equips the networks of 15 cities, expects a more expressive sales growth than recorded. "There is a huge range of digital solutions for a single city, but few municipalities project to invest comprehensively in smart city applications," says Eduardo Arcas, Head IoT Latam.

Brazil is a pioneer in the use of telemanagement technology in the public lighting of the multinational Netmore Group, with eight Brazilian cities served. Even with the recent entry in the segment, telemanagement represents 10% of the company's sales. "In terms of connected points, Brazil is responsible for about 30% of total revenue, but the impact is less, given the unfavorable exchange rate situation," explains Otavio I. Silva, Business Manager of the company. The future of implementing smart city resources through IP systems is still seen as uncertain by the executive: "There is no scale economy for sensors using the various wireless communication technologies," says the Netmore executive. "This weak ecosystem of solutions and unique choice of communication technology perpetuates the difficulty, not to mention the lack of resources to implement solutions outside the scope of COSIP".

Unidesk offers geographic intelligence solutions, providing engineering and information technology services aimed at the public lighting segment in more than 350 Brazilian municipalities, through the Gisworks solution, which allows the accurate updating of the IP inventory. The success with PPPs and a 15% increase in sales boosted the diversification of the company's portfolio. "Urbanogeo software, developed for the management of spatial data in cities, is feeling very well received by customers," says Giordano Santana, CEO of Unidesk.



NEW COSIP SHOULD BE TESTED IN PRACTICE

The Tax Reform allowed COSIP to fund monitoring systems for the safety and preservation of public places, in addition, of course, to public lighting services. As this change does not eliminate all doubts, today we are discussing Bill # 108/24, pending in the Senate, which specifies which activities can be remunerated by the tax.

Although the Bill does not list concrete activities, some services clearly fit the concepts defined there in line with the Tax Reform (remote management, video monitoring, smart radars, environmental sensors for disaster prevention). Other services, on the other hand,



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While the rules are not clear, municipalities will be able to unlink 30% of the tax

would be out of scope for COSIP (optical fiber and 5G antennas), while others remain in a gray zone, such as public wi-fi.

If approved, the Bill will give more legal certainty to the destination of COSIP, but precisely because there is no clear definition of services, the concrete solutions experienced by the municipalities will be determined to elect activities to be funded with the smallest possible margin of controversy. Therefore, experimentation is essential, either in the structuring of new projects or in terms of amendments to the concession contracts.

While the new allocations are no longer clear, municipalities may, until 2033, continue to disconnect 30% of COSIP for any purpose, including those related to smart cities for which it is not certain whether they can be remunerated for the unrelated portion. However, this possibility may not inhibit projects from being structured or contracts from being properly amended to allow these activities to be funded by the party not disconnected from COSIP.

Thus, the Tax Reform and the future regulation by law are relevant, but the true innovation will occur in the provision of specific services, which will require joint work by the public and private sectors to enable COSIP to be destined for new purposes, without, however, failing to remunerate public lighting services.

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