



# Findeter

Financial Institution for Development

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# FINETER'S PARTICIPATION IN RENEWABLE ENERGY AND SUSTAINABLE INFRASTRUCTURE



## SUBSIDIZED CREDIT LINES SUSTAINABLE INFRASTRUCTURE

Amount: COP equivalent of USD 330 million  
Interest Rate: DTF – 3.0%  
Term: up to 12 years



## SPECIAL CREDIT LINE ENERGY EFFICIENCY AND CLIMATE CHANGE

Amount: COP equivalent of USD 50 million



## SPECIAL CREDIT LINE RENEWABLE ENERGY AND STREET LIGHTING

Amount: COP equivalent of USD 33 million  
Interest Rate: DTF + 1.9%  
Term: up to 8 years

\* As of 29/05/2016 Quarterly DTF is equivalent to 7.01%

# FEATURED PROJECTS



## PUBLIC LIGHTING MODERNIZATION

Armenia, San Vicente  
de Chucurí, Pasto



## EFFICIENT REGIONAL TRANSMISSION SYSTEMS

Tolima



## SMALL HYDROPOWER PLANTS

Antioquia and Tolima



## SOLAR PHOTOVOLTAIC ENERGY

Amazonas

# MARKET STUDY FOR STREET LIGHTING

## Sample

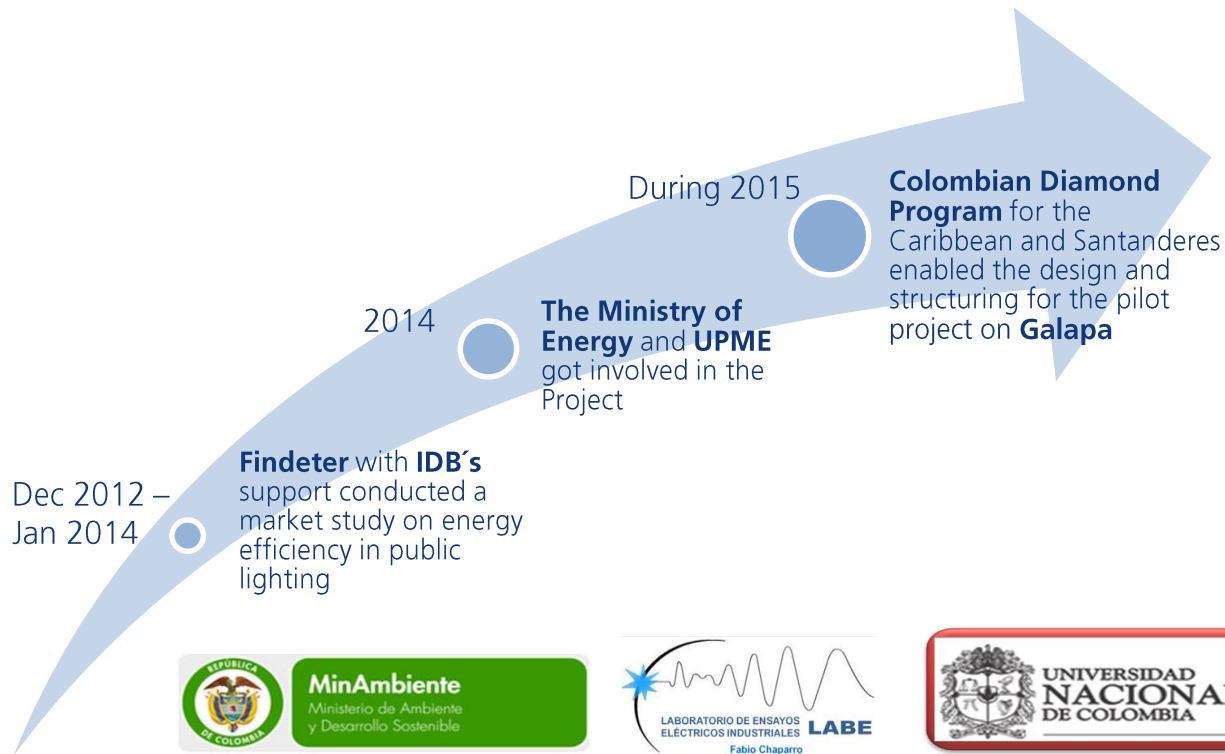
Barranquilla, Montería, Bucaramanga, Pasto, Buenaventura, Pereira, Cali, Quibdó, Cartagena, Riohacha, Cúcuta, San Gil, Florencia, Santa Marta, Galapa, Sincelejo, Manizales, Valledupar

## Target market

- Target market is 300,000 lamps
- Cost per lamp is estimated at USD 400; for a total cost of USD 120 million

## Findings

- Energy savings will result in 86,495 MWh/year
- Economic savings are estimated at USD 13.3 million / year
- Estimated payback is 5 to 8 years
- Estimated emission savings of 24,219 CO2/ year



**MinAmbiente**  
Ministerio de Ambiente  
y Desarrollo Sostenible



**MinMinas**  
Ministerio de Minas y Energía



## Eligible activities

- Street lighting
- Interior illumination
- Renewable energy systems for solar, wind, biomass, small hydropower plants, etc
- Prefeasibility studies and designs
- Monitoring systems
- Georeferentiation systems

## Financing Terms

<b>Amount</b>	USD 33 million
<b>Term</b>	Up to 8 years
<b>Grace period</b>	Up to 2 years
<b>Rediscount rate</b>	DTF + 1.90% or IPC + 4.00%
<b>Final interest rate</b>	To be agreed with the FI
<b>Beneficiaries</b>	Same as of FINDETER
<b>Effectiveness</b>	31/12/2015



MALECÓN BARRANQUILLA – LUIS CHARRIS

# STUDY CASE: BUCARAMANGA

Year	# of lamps	Technology	Energy consumption (KW/h)	Annual energy costs (USD)	Investments (USD)
2001	28,000	Mercury	32,065,894	1,999,259	0
2006	34,843	Sodium	29,442,240	2,037,624	1,429,913
2013	44,784	Sodium and LED	26,600,189	2,745,525	3,741,591
2014	Total investment as of April 30, 2014				4,833,459

- Number of installed lamps grew 60% from 2001 to 2013
- Energy consumption decreased 17% despite the increase in lamps
- Energy savings allowed investments in service improvements





# OTHER STREET LIGHTING SUCCESSFUL CASES



Alcaldía Ocaña



Parque las palmas – Bucaramanga



Alcaldía Santa marta



Iglesia la porciúncula -Bogotá



Calle real - armenia



Malecón BARRANQUILLA

Support the design of a strategy to mitigate and reduce the main barriers and risks associated with the financing of Energy Efficiency projects in LED public lighting, and create market conditions that stimulate the demand for this type investment projects, by municipalities and the private sector, and trust among the actors involved.

COMPONENTS	USD
Technical assistance and legal mechanisms	\$730,000
Financial Mechanism	\$850,000
Validation, Monitoring and Evaluation Mechanisms	\$230,000
Capacity Development and Communication	\$94,500
Management	\$95,225
<b>TOTAL</b>	<b>\$1.999.725</b>



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