

08 | 11 | 2013

# Emgesa and Codensa

## 3Q 2013 Results

As of September 30, 2013



**1**

## 2013 Highlights

**2**

**Emgesa and Codensa 3Q 2013 Operating Results**

**3**

**Emgesa and Codensa 3Q 2013 Financial Results**

**4**

**Q&A**

**Study on the competitiveness of the energy prices in Colombia**

**Execution of projects under development (El Quimbo + Salaco + Nueva Esperanza)**

**Regulatory news for the gas industry in Colombia**

**Climate conditions for 2013**

**Energy Tariff Revision (Commercialization and Distribution)**

**Electric Mobility**

**Recognitions**

**Emgesa's Local Bond Issuance**

## Conclusions

**Comparative study sponsored by the Ministry of Commerce of Colombia and conducted by ECSIM on the impact of energy tariffs in the productivity and competitiveness of the companies in Colombia**

- ❖ **Energy tariffs in Colombia** for the residential and industrial sectors **are in the average of the energy tariffs of the OECD countries**, in spite of the increase in prices in the last five years
- ❖ There are countries included in the study that have **lower energy tariffs than in Colombia**, but with different regulatory frameworks or with subsidies from the Government.
- ❖ The **energy exchange works relatively well**.
- ❖ There are some **opportunities to improve the functioning of bilateral contracts through alternatives such as a Centralized Regulated Market**.
- ❖ The **study proposes a review of the valuation of the assets of the energy industry** to avoid sudden changes during the periods of tariff review.

# Execution of projects under development

Advances in the execution of strategic project for Colombia's energy supply

## Quimbo

**51,7% of physical execution**

**Budget: USD\$837 million**  
**Accumulated Investment of USD\$502.6 million**

Hydroelectric plant  
400 MW (2x200 MW Francis)  
Average generation of 2,090 Gwh/year

- ❖ Advances in:
  - Alternative routes – II Tranche and overpass bridge
  - Concrete face of dam
  - Dumping site
  - Auxiliary dam and engine room
- ❖ Advances in the production, supply and assembly of the engines, generator and gates

## Repowering of Salaco

**53,3% of physical execution**

**Budget: USD\$43,7 million**  
**Accumulated Investment of USD\$16,02 million**

Repowering of 6 generation units in the Salto II, Laguneta and Colegio power plants.  
Increase of 144,8 MW in installed capacity for a total of 221 MW  
Beginning of commercial operations: December 2014

- ❖ Important advances in the update of equipments and major maintenances.
- ❖ **2013: Beginning of commercial operations of Unit 2 (Nov 3, 2013) and Unit 5 of the Colegio plant (December 30, 2013)**



## Removal of archeological findings:

- Removal of material of the area authorized by the regional environmental authority
- Removal of material of the high basin authorized by the Ministry of Environment

## Archeological rescue

- National Archeological Authority: "Highly relevant finding" (12 months)
- Additional investment of COP\$9 billion. (USD\$4,7 million) with the intervention of 103 archeologists and specialized technicians

## Contingency Plan

- Continuous work with the authorities to design projects to ensure reliability of the energy supply during 2014 and 2015, while the Nueva Esperanza Substation starts commercial operations.

## Nueva Esperanza Substation



# Natural Gas Wholesale Market

Important advances in the regulation of the gas industry to open new opportunities for businesses

**Local regulator for the energy and gas industry ruled the commercial activity of the wholesale market of the gas industry by Resolution 089 of 2013.** This rule is the product of the discussion process conducted previously with the representatives from the industry by Resolution 113 of 2012

- ❖ Supply trade according to balance
- ❖ Standardization of contracts:
- ❖ Types + Length requirements + reporting + registration

Primary market

Secondary Market

Manager of the market

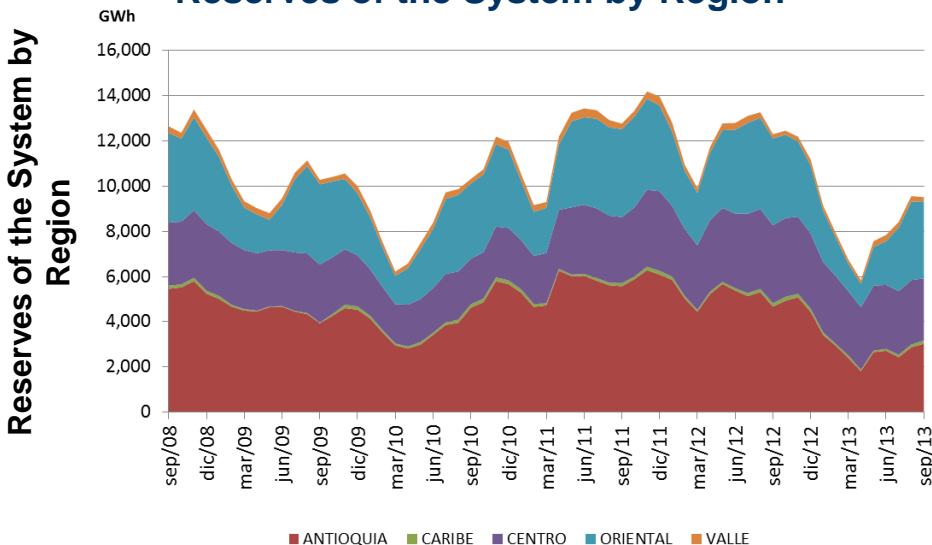
- ❖ Direct negotiations or through processes of “use it or sale it” in the supply and transportation (short and long term)
- ❖ Transition periods

- ❖ Information about the trading in the primary and secondary market : centralization of trading, operation and monitoring of the market.
- ❖ Management mechanisms: auctions in the primary market, commercialization in the secondary market and auctions of gas of interruptions.

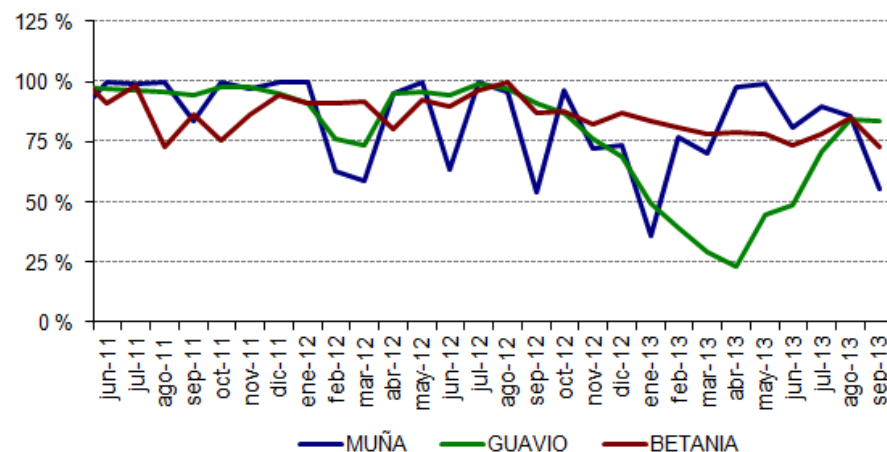
# Hydrological conditions during the year

Higher hydro reserves in the Central and Western regions

## Reserves of the System by Region



## Volume of the Reservoirs of Emgesa



| Region              | Sept. 2012             |                 | Sept. 2013             |                |
|---------------------|------------------------|-----------------|------------------------|----------------|
|                     | Daily useful volumen % | GWh             | Daily useful volumen % | GWh            |
| Antioquia           | 76,1                   | 4.672,6         | 49,8                   | 3.035          |
| Caribbean           | 78,5                   | 150,9           | 76,1                   | 146,4          |
| Center              | 81,1                   | 3.446,5         | 64,5                   | 2.738,5        |
| Eastern             | 91,3                   | 3.840,8         | 82,6                   | 3.410          |
| Western             | 40,8                   | 184,8           | 41,2                   | 185,7          |
| <b>Total System</b> | <b>80,7</b>            | <b>12.295,6</b> | <b>62,9</b>            | <b>9.515,6</b> |

**Higher rain levels received in the Eastern region during 2013**

Rain levels of the system at the historical average (90% of historical average- HA). Rain levels of Betania, Guavio and Muna at 102% of the HA, 84% of HA and 82% of HA respectively.

Source: XM

As of September 30, 2013



2013: revision of methodological bases for the energy tariff period in place starting 2014

- ❖ **5 year regulatory period.**
- ❖ **Variable component of commercialization in place for almost 13 years, with periodic updates by inflation and productivity factor.**
- ❖ **Distribution component in place since September 2008.**

## 2013 – 2014 Revision

- ❖ **Revision of the WACC applicable to calculate the return on the investment in electrical assets.**
- ❖ **Update of methodologies to value assets.**
- ❖ **Commercialization component revision.**

## E-bikes

- ❖ 196 users
- ❖ 24 e-bikes
- ❖ 123,356 Km traveled
- ❖ 1260 days saved in transportation



## Company's Fleets



- ❖ Largest commercial fleet in Colombia with 16 Electric Vehicles
- ❖ Agreements with housing projects and auto companies (Nissan, Mitsubishi, Renault)

## Electric Taxis

- ❖ Public and Private initiative
- ❖ Pilot fleet: 50 vehicles
- ❖ Energy services, 4 energy lines in Bogotá, 55 chargers.



## Massive Transportation



- ❖ Submission of Electric Transmilenio Phase I and II Project by Bogota Elekrika (PPA).
- ❖ Investment of \$91.5 M€, 74 Km of overhead power cables, 455 trolley buses between 2015 and 2021
- ❖ Transmilenio Boyaca, metro, trams



**Recognition from Colombian Stock Exchange (BVC) to corporate issuers of fixed income and equity in Colombia for:**

- ❖ Increasing their models of revelation of information and investor relations standards voluntarily.
- ❖ Making the entire content of the web pages in Spanish and English available to investors



**From the 29 companies recognized only 5 were issuers of fixed income instruments only. Codensa and Emgesa were among this group.**



**86.4% of satisfaction index of the quality perceived by Codensa's clients in 2013**

**10.2% improvement** compared to the 2012 result (sixth place in 2013)

Best performing variables:

- ❖ Image (88.5%)
- ❖ Client service (84.0%)
- ❖ Information and communication (77.8%)

CIER: Regional Commission of Electrical Integration. The members include Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru and Uruguay. The CIER performs an annual study measuring the satisfaction of residential clients of the distribution companies of Latin America regarding 5 different areas of quality of the energy supply image, information and communication, billing and client service.



**Programs to improve Employee's Quality of Life:**

- ❖ Flexible schedule
- ❖ Telecommuting
- ❖ A day off every four months
- ❖ Leave of absent on the employee's birthday.
- ❖ Loans for vehicles, housing, vacations and master studies.
- ❖ Loans for home appliances and home improvements in Christmas every two years.



# Emgesa's Local Bond Issuance

Advacne in El Quimbo project financing plan and the prefunding of 2014 maturities

Issuance of the Fifth Tranche of the Local Bond Program  
**COP\$565 Bn**

(September 2013)

|                | Amount Issued (Bn COP) |       | Yields      |
|----------------|------------------------|-------|-------------|
| B6 Sub-series  | \$ 201,97              | 1.6 X | CPI + 4.25% |
| B12 Sub-series | \$ 363,03              | 1.5 X | CPI +5.00%  |
|                | \$ 565,00              | 2.2 X |             |

- ❖ Total demand for more than COP\$880.7 Bn (over demand of 2.2x the initial amount offered)
- ❖ Great interest in the deal from local investors confirming investor confidence in Emgesa's management and high recognition as a well-seasoned bond issuer
- ❖ Use of proceeds: El Quimbo investments (COP\$515,6 Bn) and prefunding of a bond maturity in 2014 (COP\$49,4 Bn).



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# Colombia for the Endesa Group

Relevant assets with growing participation within the Endesa Group



**EBITDA Endesa 9 Months 2013**  
€5.25 Bn

Latin America

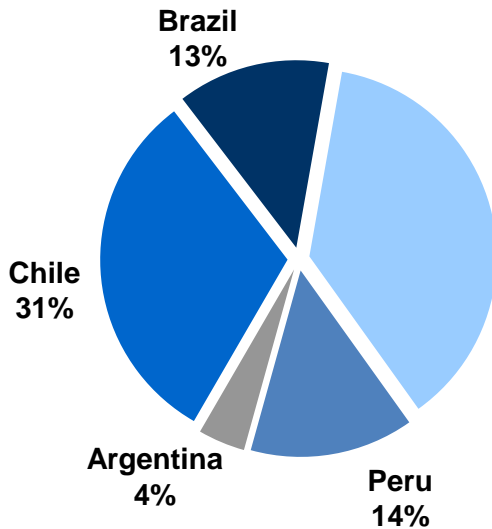
€2.554 MM 49%

Spain, Portugal and others

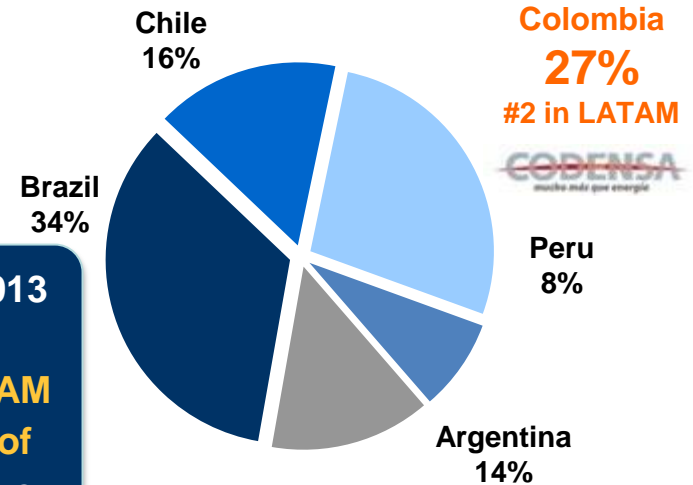
€2.697 MM 51%

**Latam Generation EBITDA**  
€1,252 MM

**Latam Distribution EBITDA**  
€1,288 MM



**Colombia**  
**37%**  
#1 in LATAM  
emgesa endesa



During the first 9 months of 2013  
**Colombia was the first contributor of EBITDA en LATAM (32%)** and represented **16% of the consolidated EBITDA of the Endesa Group**

# Emgesa's Generation

Increasing thermal generation from the total due to low rain levels

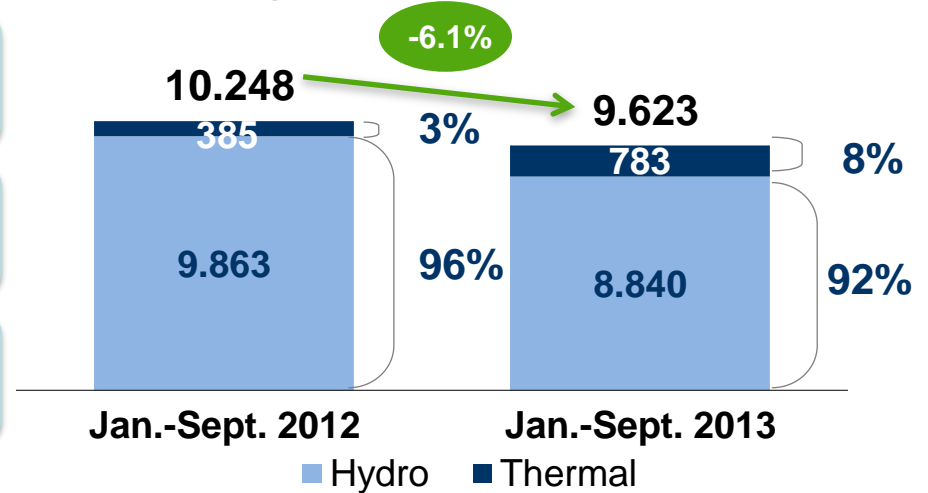
Availability index of plants: **91.5%**  
(+1.6% vs. Sept.12)

Market share by installed capacity: **19.7%**  
(-0.1% vs. Sept.12)

Market share by generation: **20.7%**  
(-2.3% vs. Sept.12)

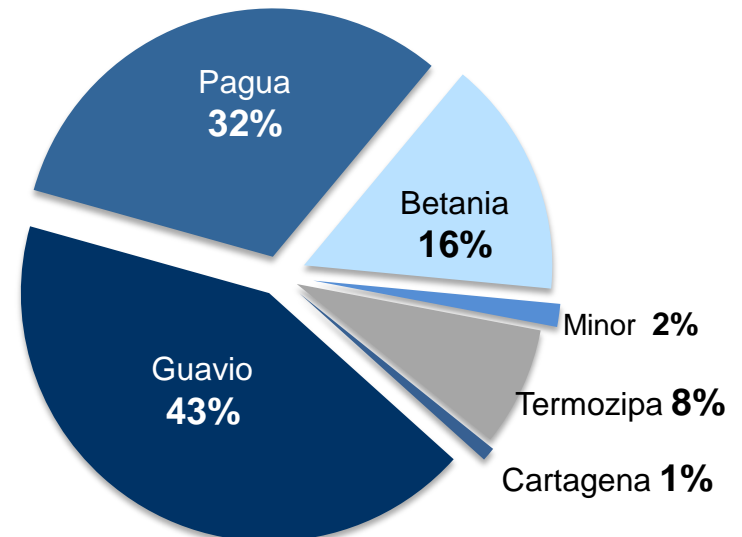
Source: Emgesa

## Emgesa's Generation (GWh)



## Emgesa's Generation Plants

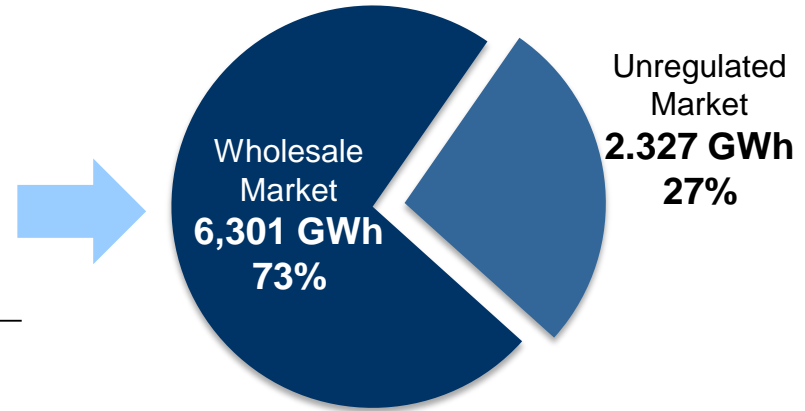
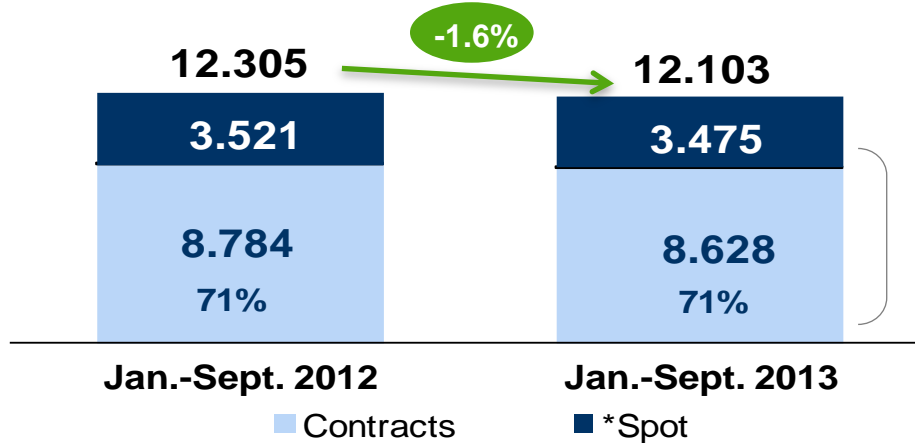
(% of Emgesa's accumulated generation Jan.-Sept. 2013)



**Persistence of dry conditions during 3Q 2013 leading to increased thermal generation to preserve water**

Continued intermediation activity in the spot market to preserve water reserves

## Energy Sales (GWh)

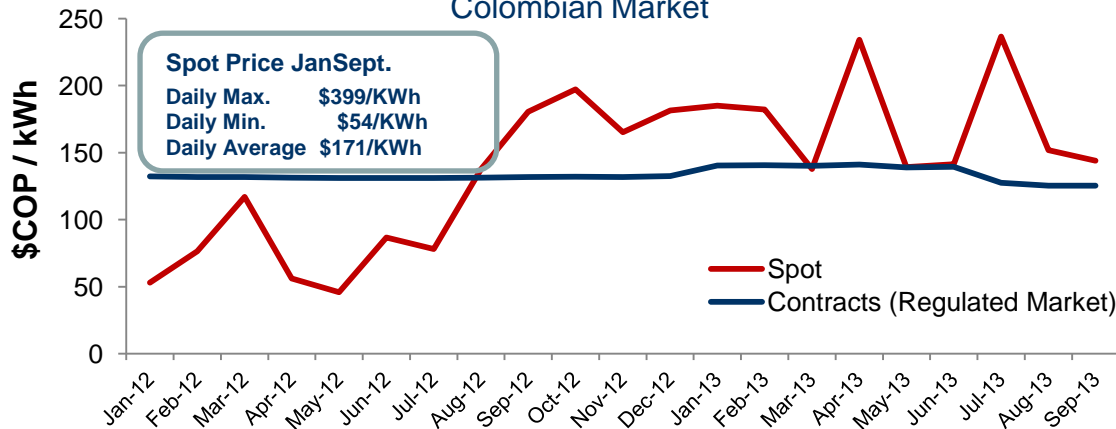


Source: Emgesa

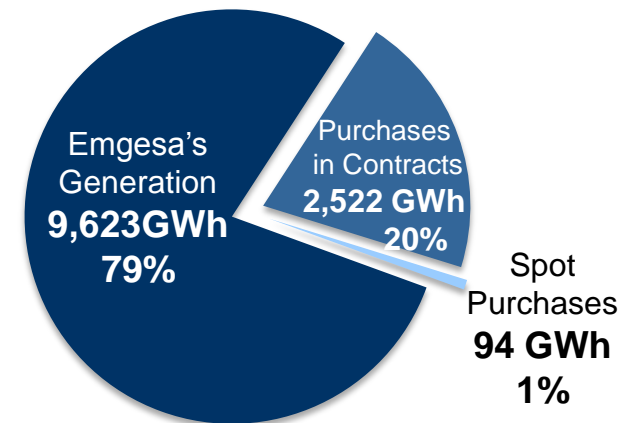
\* Sales in spot market include AGC, which is the secondary frequency regulation of certain power plants to regulate electricity frequency and the quality within the system.

## Spot Price vs. Contract Prices 9 months 2013

Colombian Market



## Energy Sales Hedging Jan-Sept.2013 (GWh)



**Commercial policy aims for the equilibrium between the sales through contracts and the spot market and the hedging: 71% on sales through contracts and 79% of sales with own generation**

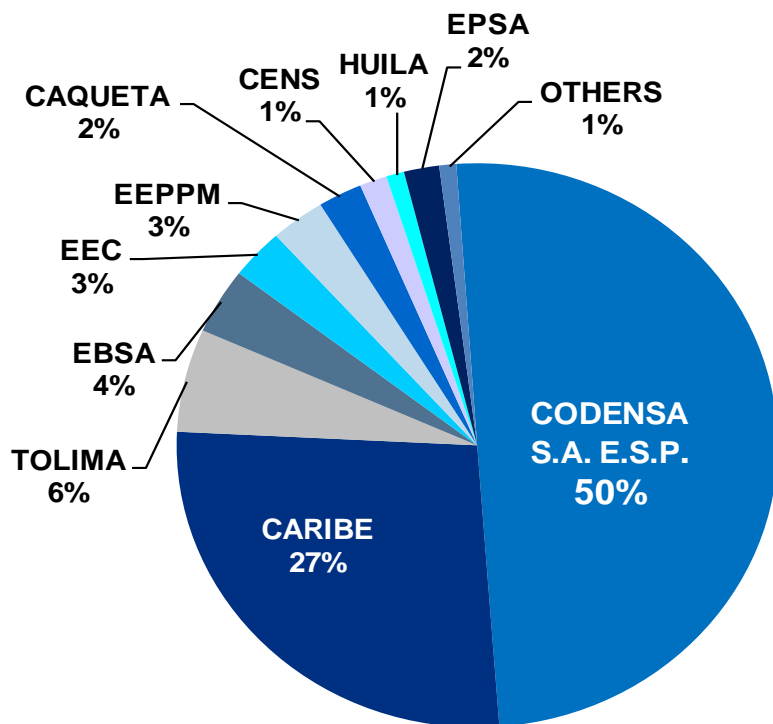


# Emgesa's Client Base

Optimal mix of sales through contracts to the wholesale and the unregulated markets

## Wholesale Market Clients

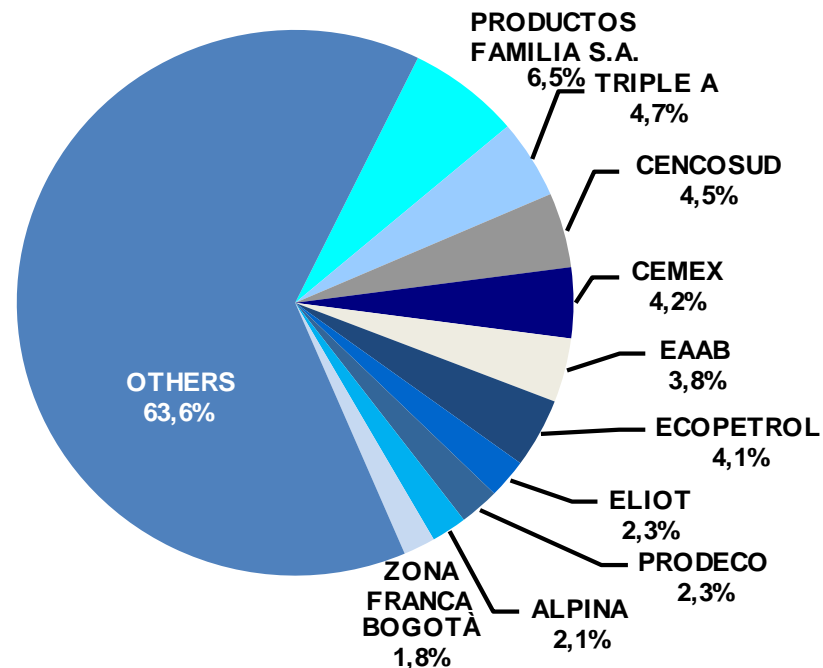
(% of sales to the wholesale market in GWh Jan.-Sept- 2013)



**Sales to the Wholesale Market: 6,301 GWh**  
More than 14 clients served in this market

## Unregulated Market Clients

(% of sales to the unregulated market in GWh Jan.-Sept.- 2013)



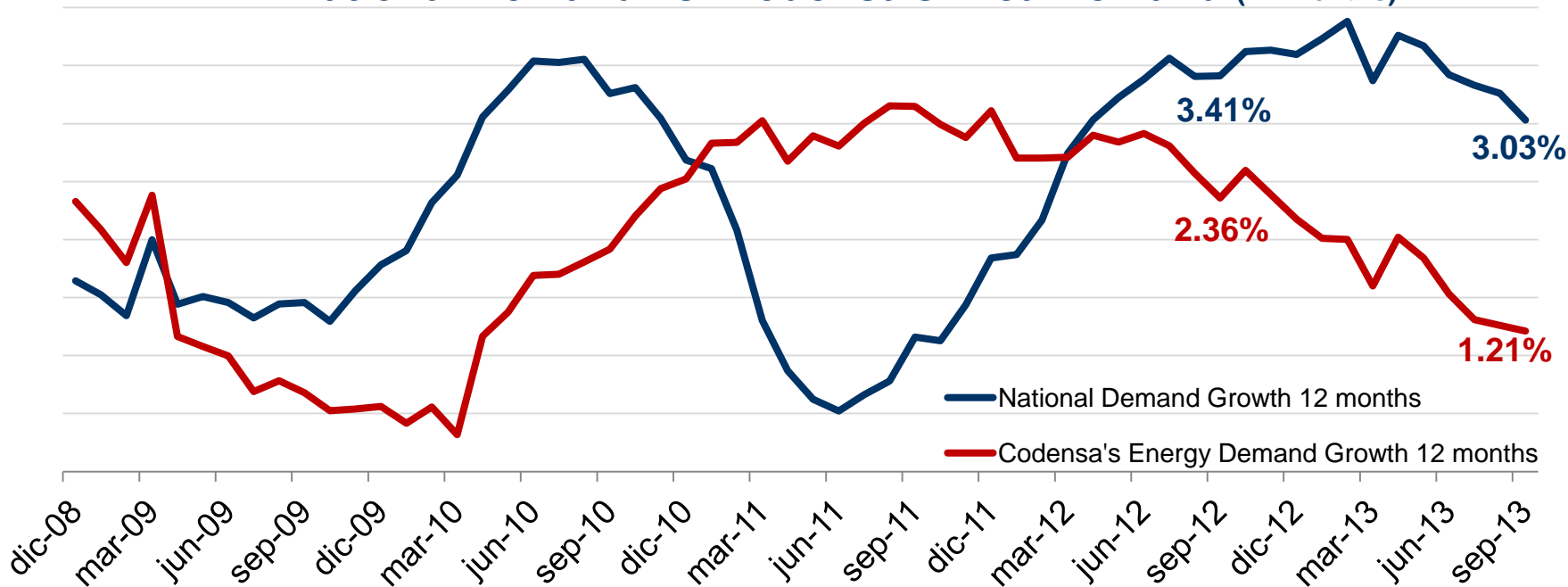
**Sales to the Unregulated Market: 2,327 GWh**  
Monthly average of **769 commercial frontiers served**  
**13,7%** of the total of this market

**2.5% growth in sales** through contracts to large industrial and commercial clients

# Codensa's Area Demand

Sustained decrease in the growth rate of energy demand in Codensa's area

## National Demand vs. Codensa's Area Demand (12 months)



Source: Codensa. Annual Average Rates

\* Energy demand in Codensa's area is calculated including the electricity received by the Guaca Substation which is destined to the regional distribution company of Tolima from 2013 on, increasing the use of Codensa's networks by other network operators. For comparison reasons the data from January 2011 was recalculated including this correction.

**National energy demand growth at 3.03%** as of Sept. 2013, moderating its growth due to the decreasing consumption from the regulated and unregulated market, as the later was affected by the low consumption of OXY due to the terrorist attack to its pipeline and the decrease in the industrial production

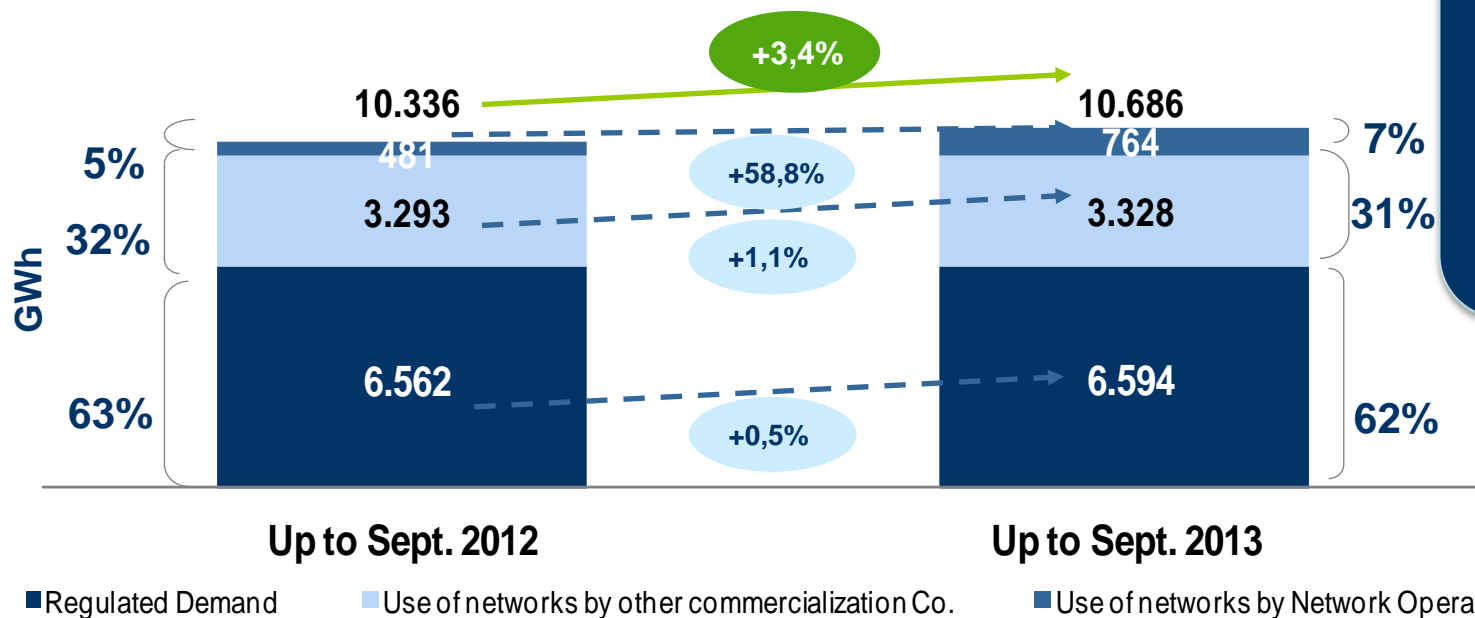
**Growth rate of energy demand in Codensa's area at 1.21%**, maintaining a slight recovery in the residential and commercial demand, in the midst of a decrease in the demand from the industry in the central region of the country

# Codensa's Energy & Sales

Growth in the sales volume in the regulated market and in the use of networks by other commercialization Co.

## Electricity Demand in Codensa's Area

(GWh)



**Codensa: #1**  
 distribution  
 company in  
 Colombia:  
 23.7% of National  
 Demand  
 22% of Regulated  
 Demand

Source: Codensa. Energy transferred to network operators from other regions includes energy sent to Tolima from 2011 to September 2013.

**Sept.12vs. Sept. 13: +0,5%** growth in energy sales volume to the regulated market

**Sept.12vs. Sept. 13: +1,1%** in use of Codensa's networks by other commercialization Co., as a result of slowdown of industrial activity in the central region

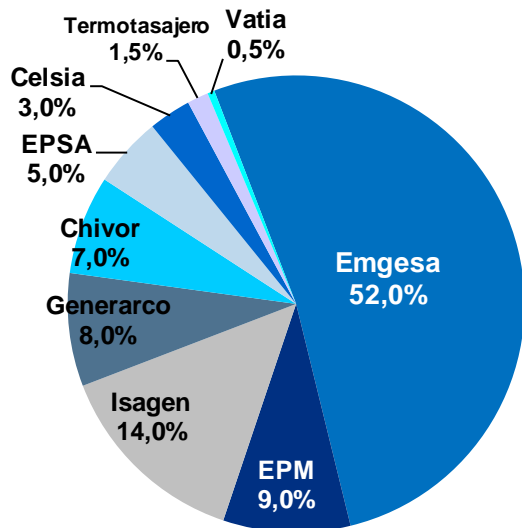
**Sept.12vs. Sept. 13: +58,8%** growth of energy transferred to network operators from other regions from Codensa's area a

# Codensa's Commercial Policy

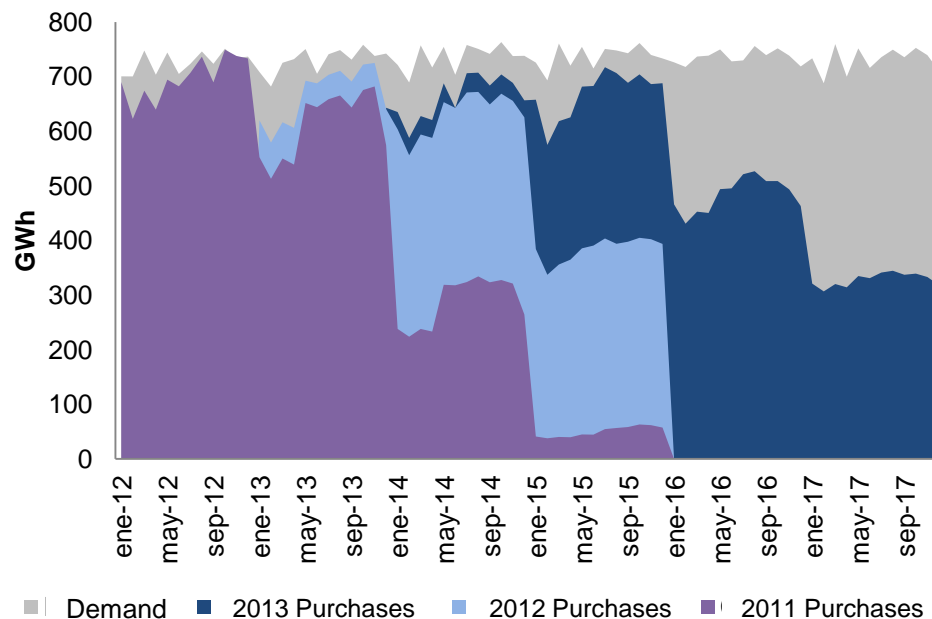
Active strategies to hedge prices of energy demand from the regulated market

## Main Suppliers of Electricity for Codensa Jan-Sept. 2013

(% of purchases in terms of GWh)



## Hedging Through Contracts (GWh)



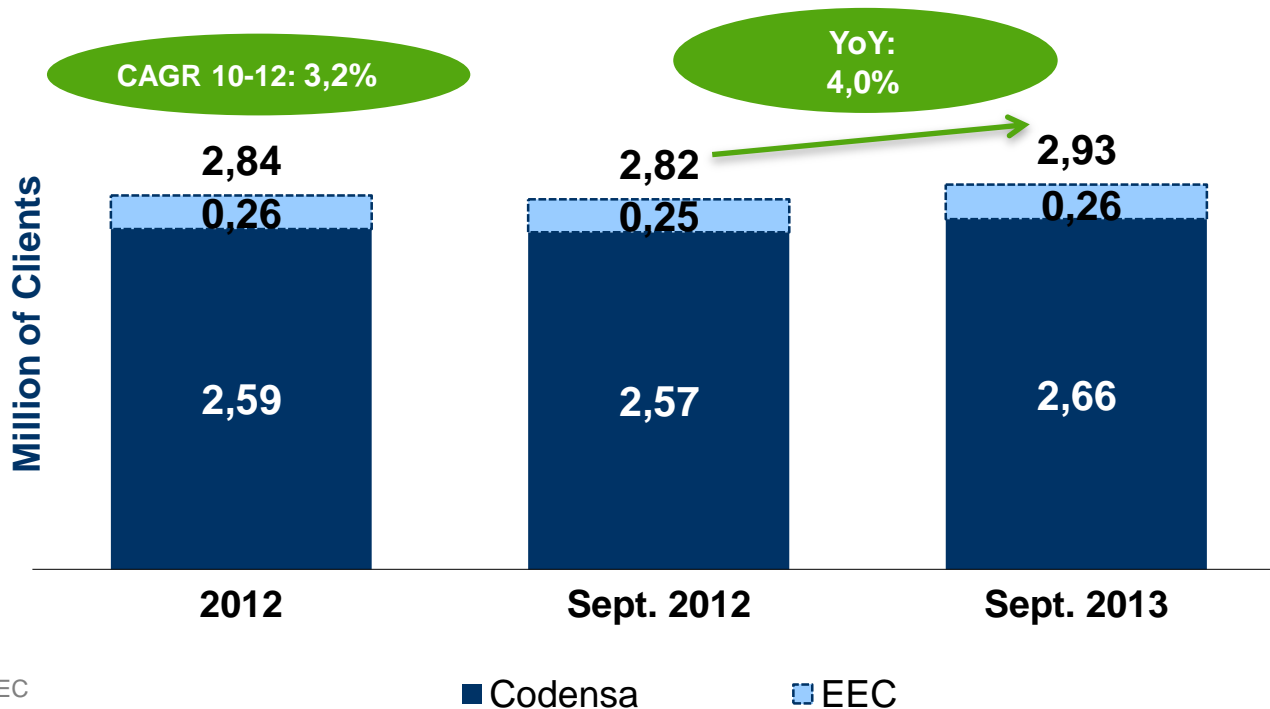
Energy purchase hedging through contracts: **91% (2013), 90% (2014), 91% (2015), 66% (2016) and 45% (2017)**

Commercial policy aims to **increase hedging of energy demand through long term contracts** to guarantee efficient and stable tariffs to the regulated market reducing the exposition of clients to changes in the spot price

# Codensa's Growth of Client Base

Important organic growth of client base

## Growth in Number of Clients in the Distribution Business



Source: Codensa and EEC

Important organic growth in Codensa's area:

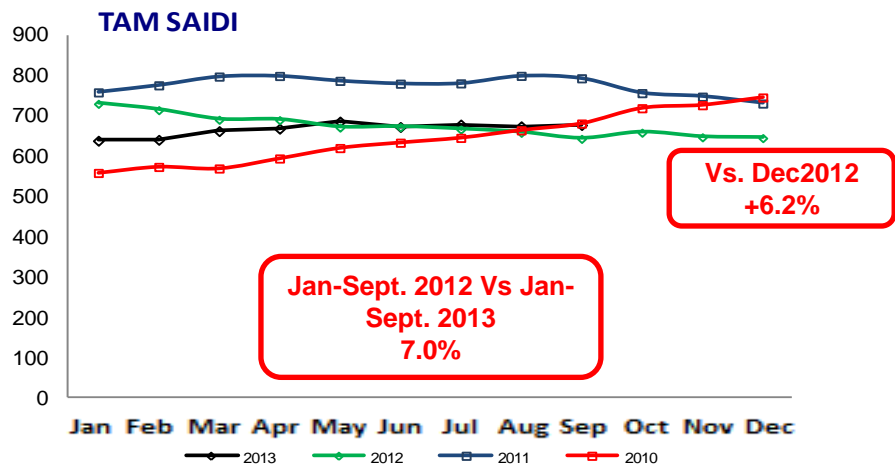
**+99,108 new clients added YTD 2013**

More than **1 million calls from clients received and resolved** and more than **3 million transactions via web page** from Codensa's clients up to September 2013

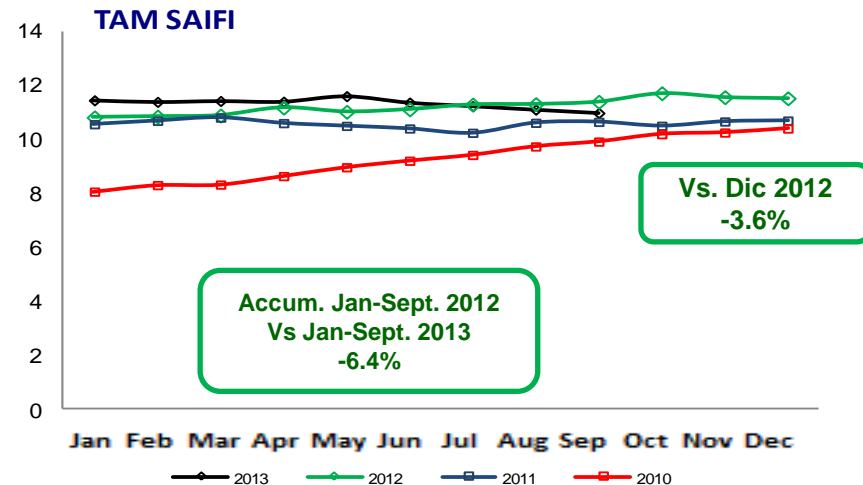
## Quality of Service International Indexes

12 months

### SAIDI\*



### SAIFI\*\*



Source : Codensa

\*SAIDI: Average Interruption Duration Index

\*\*SAIFI: Average Interruption Frequency Index

Index results are considered manageable incidents by the company excluding the larger forces and external events.

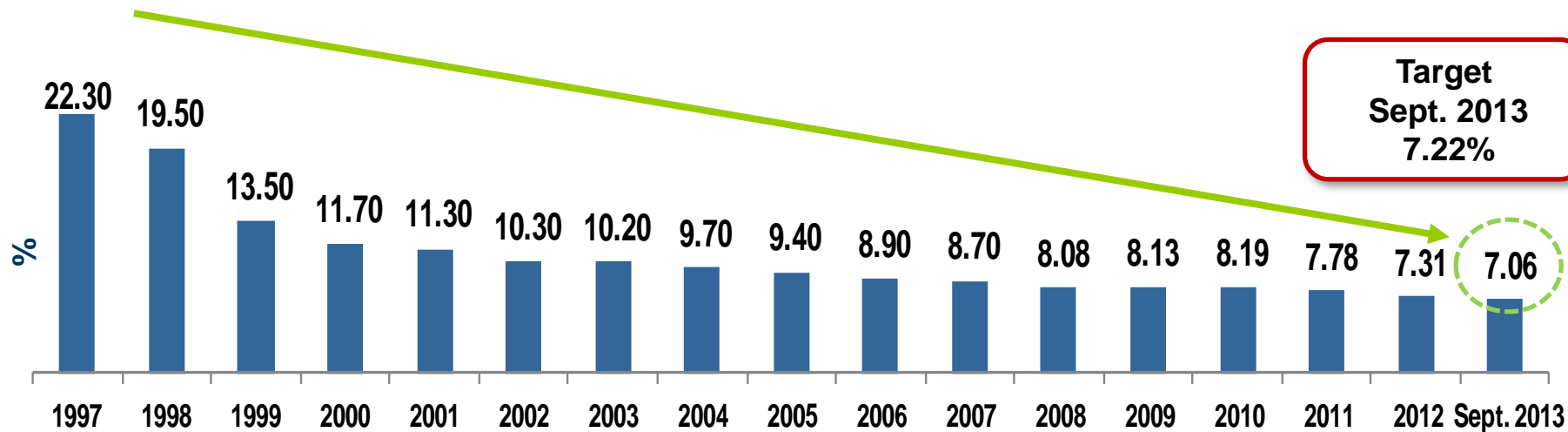
Data just includes medium tension information.

**Improvement in the number of interruptions of the electricity service (SAIFI index). However, Codensa experienced an increase in the interruption time index (SAIDI index) due to due to some network failures and rains in March and May of 2013 in the area of influence of Codensa.**

**To mitigate the effect on the SAIDI index results', Codensa launched a series of contingency plans during the windy season and the winter season, which have resulted in an improvement of the index by October 2013.**

Continuing downward trend and record low levels of Codensa's losses index

## Energy Losses Index



Source: Codensa

**Losses Index remains at historical lows: 7.06%** as of September 2013 due to **continuous efforts** by the technical areas and **new technologies implemented in the last years**, such as the monitoring center *Mantis*, the remote measurement in medium tension, theft control, client monitoring and programs to incentivize payment of the energy service

**1** 2013 Highlights

**2** Emgesa and Codensa 3Q 2013 Operating Results

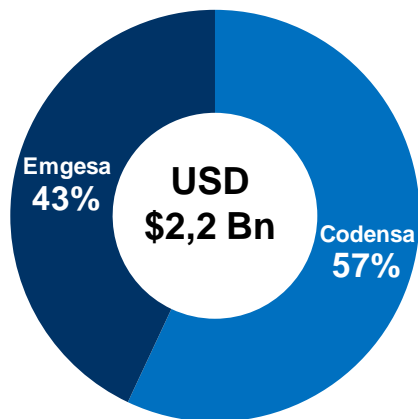
**3** **Emgesa and Codensa 3Q 2013 Financial Results**

**4** Q&A



## Endesa Group in Colombia 3Q2013<sup>(1)</sup>

YTD Sept. 2013 Revenues



Generation:

Rating upgraded from BBB- to BBB by Fitch Ratings and by Standard & Poor's

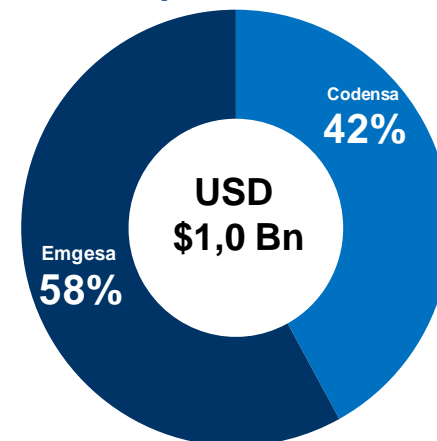
FitchRatings  
STANDARD  
& POOR'S

International <sup>(2)</sup>:  
BBB /BBB

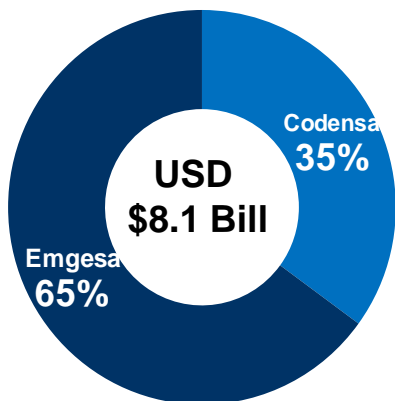
FitchRatings

Local: AAA

YTD Sept. 2013 EBITDA



Assets as of September 2013

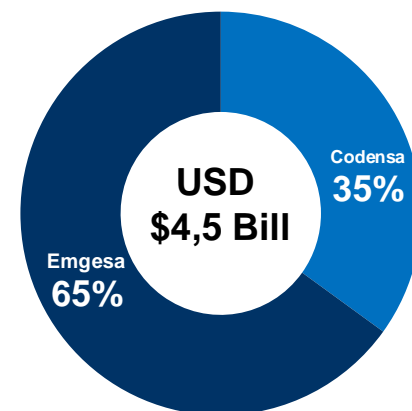


Distribution:

FitchRatings

Local: AAA<sup>(2)</sup>

Equity as of September 2013



(1) Corresponds to aggregated and audited figures for Codensa and Emgesa as of September 30, 2013

(2) Rating upgraded in May 2013 by Fitch Ratings and by Standard & Poor's

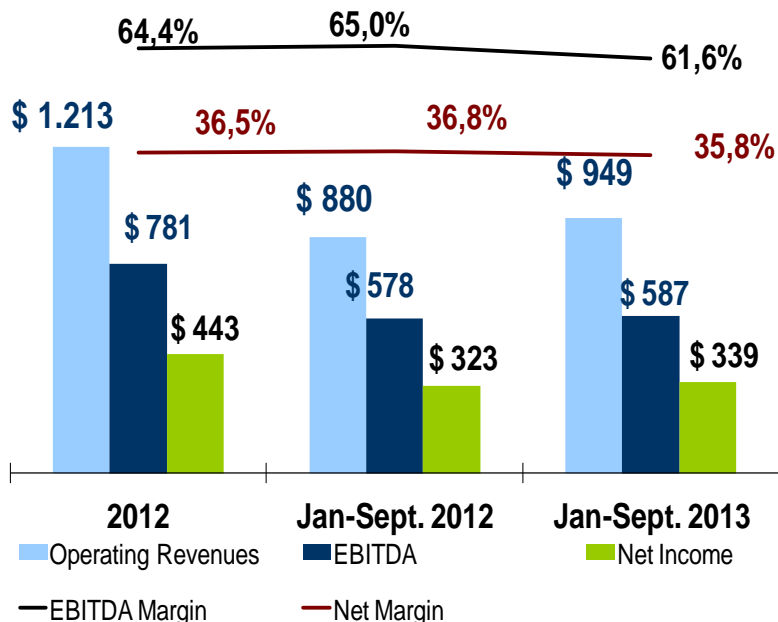
Financial figures are presented in USD using the official FX rate applicable by the end of each period. However, financial statements are prepared under Colombian GAAP in pesos, and therefore, we have calculated ratios and variations in COP in order to exclude any impact from the indicative FX conversion herein.

# Emgesa's Financial Results

Commercial policy's effectiveness proven in financial results

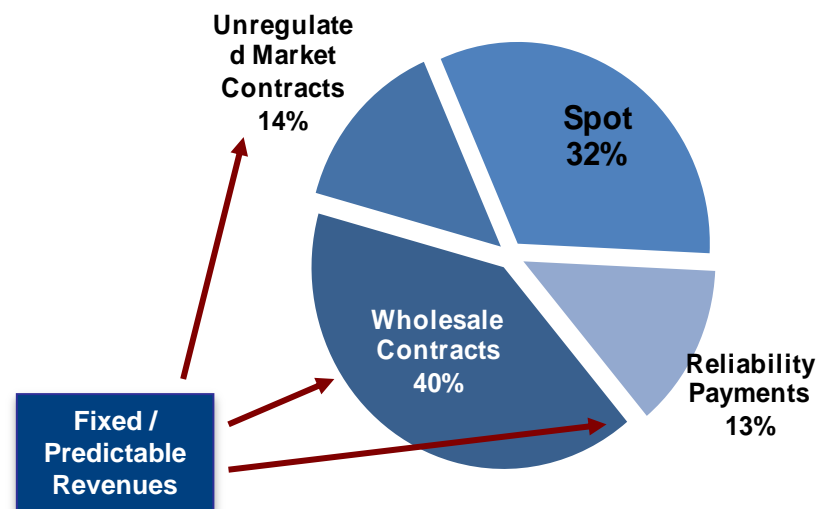
## Financial Results and Margins

(Million USD)



## Sales Composition

Jan.- Sept. 2013 (% of operating revenues)



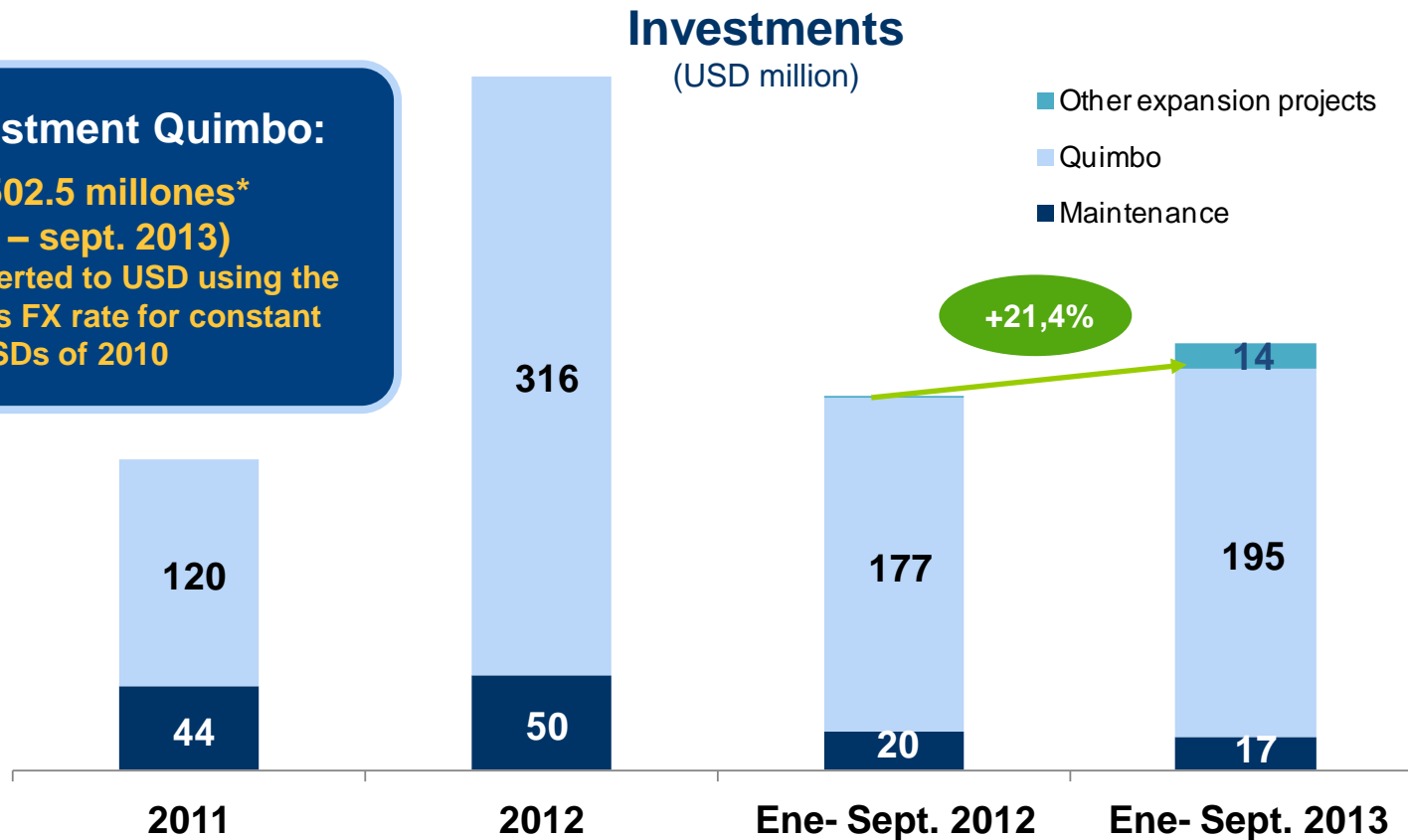
\*EBITDA is calculated by adding back the depreciation and amortization (included in cost of sales and administrative expenses) to operating income.

**+14.4% operating revenues, , +7.6% EBITDA and +11.1% net income (YoY)**

**Strong commercialization activity in the spot market to compensate for lower generation due to drier conditions during 2013, leading to positive results in operating revenues as energy prices continue to rise**

**Despite the 24.4% increase in cost of sales, due to higher thermo generation, the commercial policy contributed to reduce operational margin volatility**

**Total Investment Quimbo:**  
**USD\$502.5 millones\***  
**(2010 – sept. 2013)**  
 \* Figure converted to USD using the homogenous FX rate for constant USDs of 2010



Emgesa's investments increased by 21.4% as compared to the same period of 2012 , due to expansion investments in **El Quimbo Project and the repowering of Salaco Chain.**

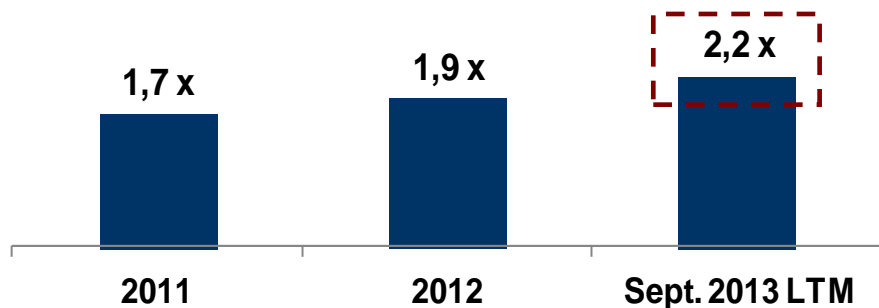
**Capex** also focused in preventive maintenance for hydro and thermo plants.

# Emgesa's Key Credit Metrics

Strong financial ratios after funding 84% of El Quimbo Project

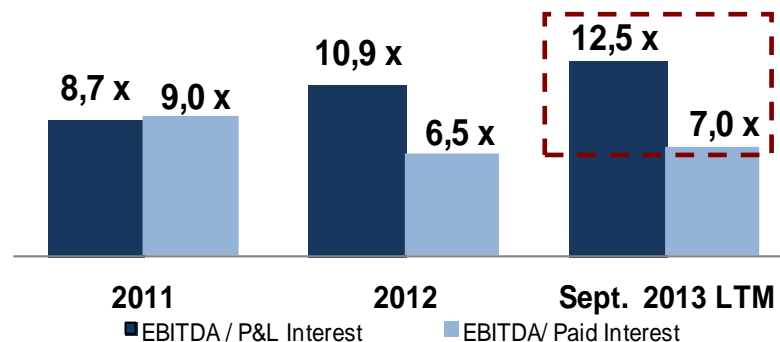
## Debt/ EBITDA<sup>(1)</sup>

El Quimbo and Salaco investment effect



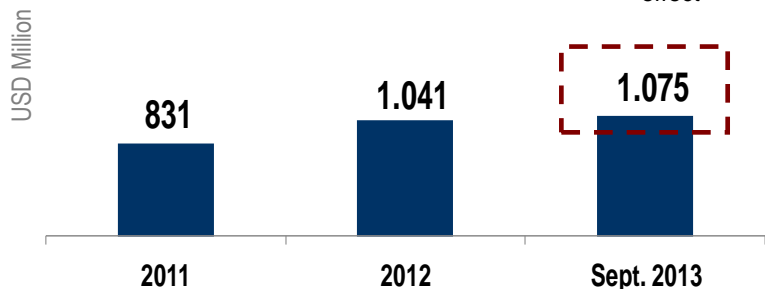
## EBITDA / Interest Expenditure<sup>(2)</sup>

Increase in EBITDA + Lower interest rates



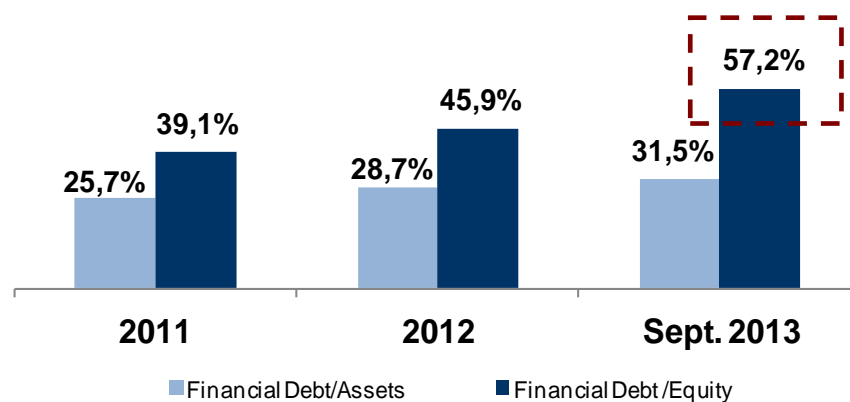
## Net Financial Debt

El Quimbo and Salaco investment effect



## Leverage

Increase in financial debt



(1) EBITDA is calculated by adding back the depreciation and amortization (included in cost of sales and administrative expenses) to operating income.

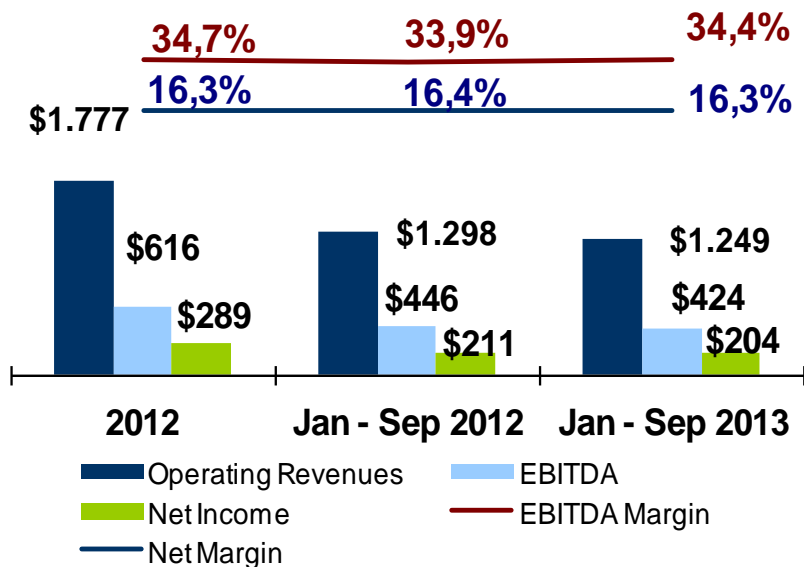
(2) Financial expenditure associated to El Quimbo financing is being activated during the construction period of the project and will be reflected in the Company's P&L once the project starts its commercial operations. This is the reason for presenting two different calculations for the EBITDA/ Interest Expenditure.

# Codensa's Financial Results

Operational revenues growth and margin stability

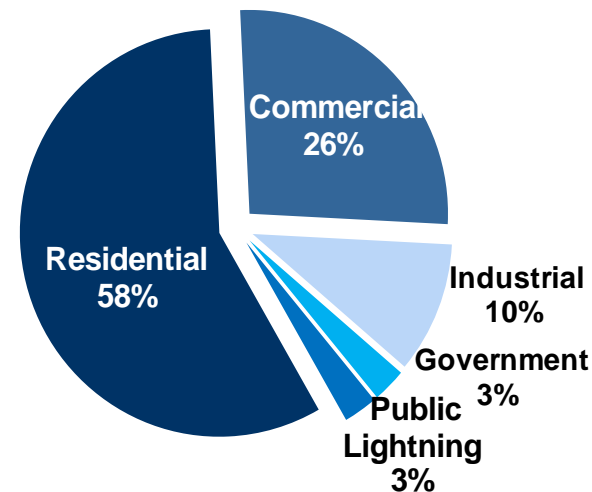
## Financial Results and Margins

(Million USD)



## Sales Composition

3Q 2013 (% of Operating revenues)



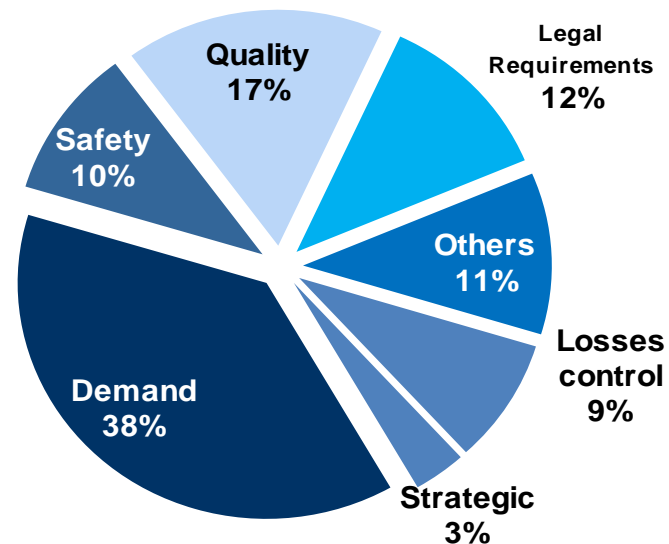
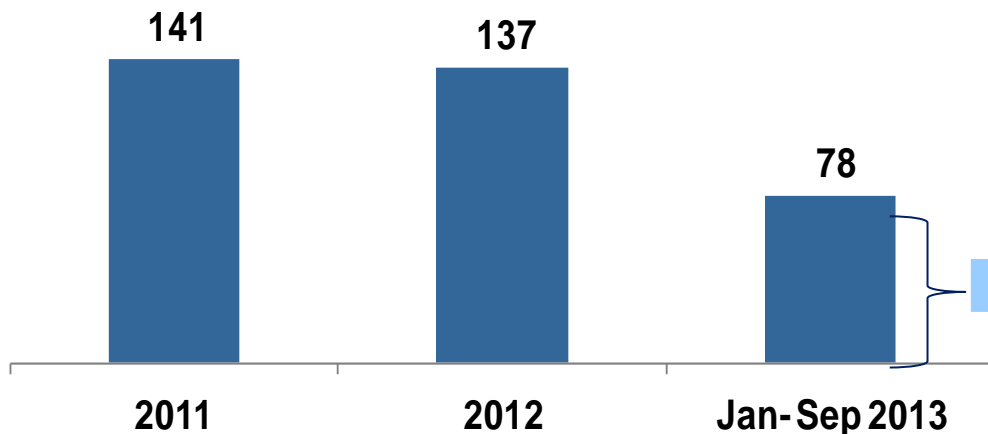
**+2.0%** operating revenues, **+0.8%** EBITDA and **+2.7%** net income (Sept. 12 vs. Sept. 13)

Stability in net and EBITDA margin. Slight **recovery of energy demand from regulated and commercial clients** and important reduction of net financial expenditure due to lower interest rates and debt balance.

Sales to residential and commercial clients: **84%** of operational revenues

Investments focused on serving demand growth, safety and quality service

## Investments (Million USD)



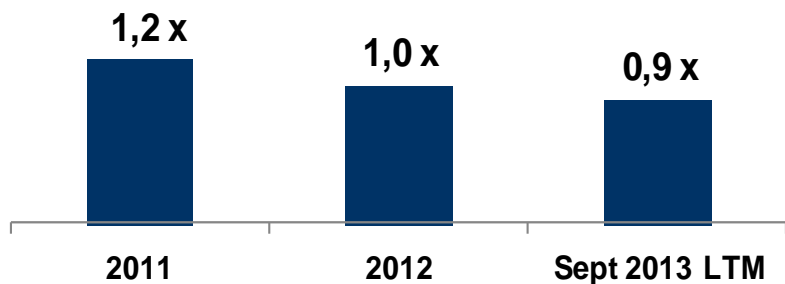
**Total investments reached USD\$78 million between January and September 2013, mainly focused in:**

- ❖ **Serving growing demand, through new substations that guarantee energy supply for the country, such as Nueva Esperanza, Norte and reactive power compensations in Bacatá, Tibabuyes, Usme and Ubate: USD\$17.1 million**
- ❖ **Improve quality service and continuity: USD\$6.6 million**
- ❖ **Control operational risks for safety conditions: USD\$7.6 million**

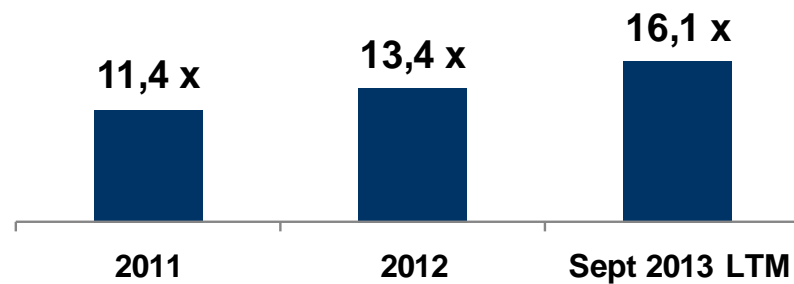
# Codensa's Key Credit Metrics

Conservative risk profile consistent with AAA local rating

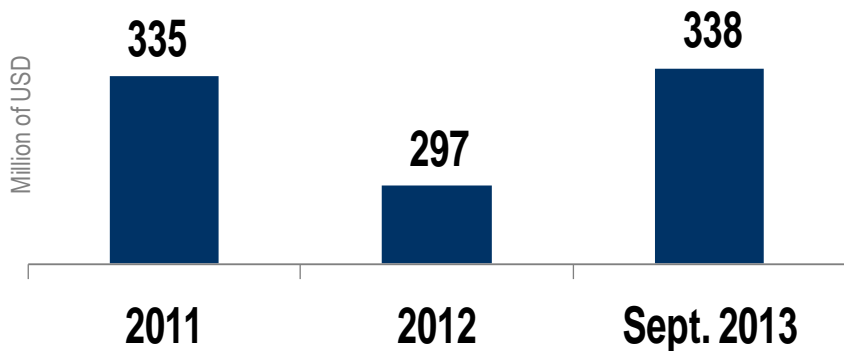
### Debt/ EBITDA<sup>(1)</sup>



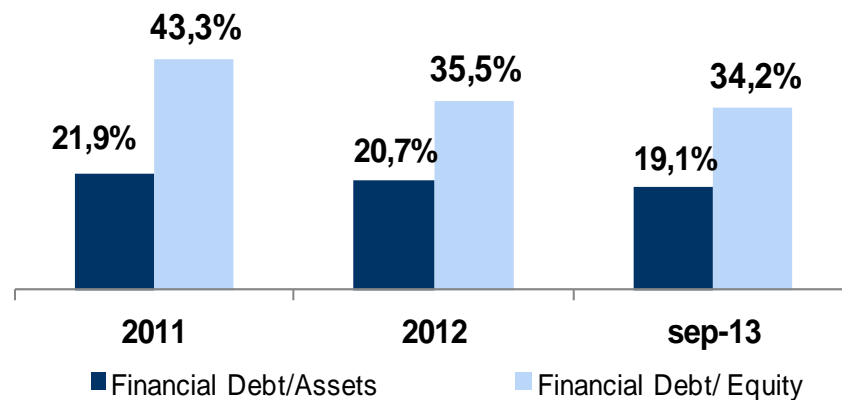
### EBITDA / Interest Expenditure



### Net Financial Debt



### Leverage



**Important growth in operational results** in spite of a dryer than average and expected season and a decrease in the national industrial production

**Progress in the execution of major strategic projects** for the energy sector in Colombia

**Participation in new businesses** and **new opportunities for growth**

**Strong and stable financial results** with low financial leverage and conservative credit metrics

**Working in line to face new challenges**, such as the energy tariff revision, the quality of service, the electric mobility and the development of new markets

**Public recognition from our *stakeholders* for our commitment to sustainability** (IR Recognition, CIER survey and Family Responsible Company certification)



**1** 2013 Highlights

**2** Emgesa and Codensa 3Q 2013 Operating Results

**3** Emgesa and Codensa 3Q 2013 Financial Results

**4** Q&A

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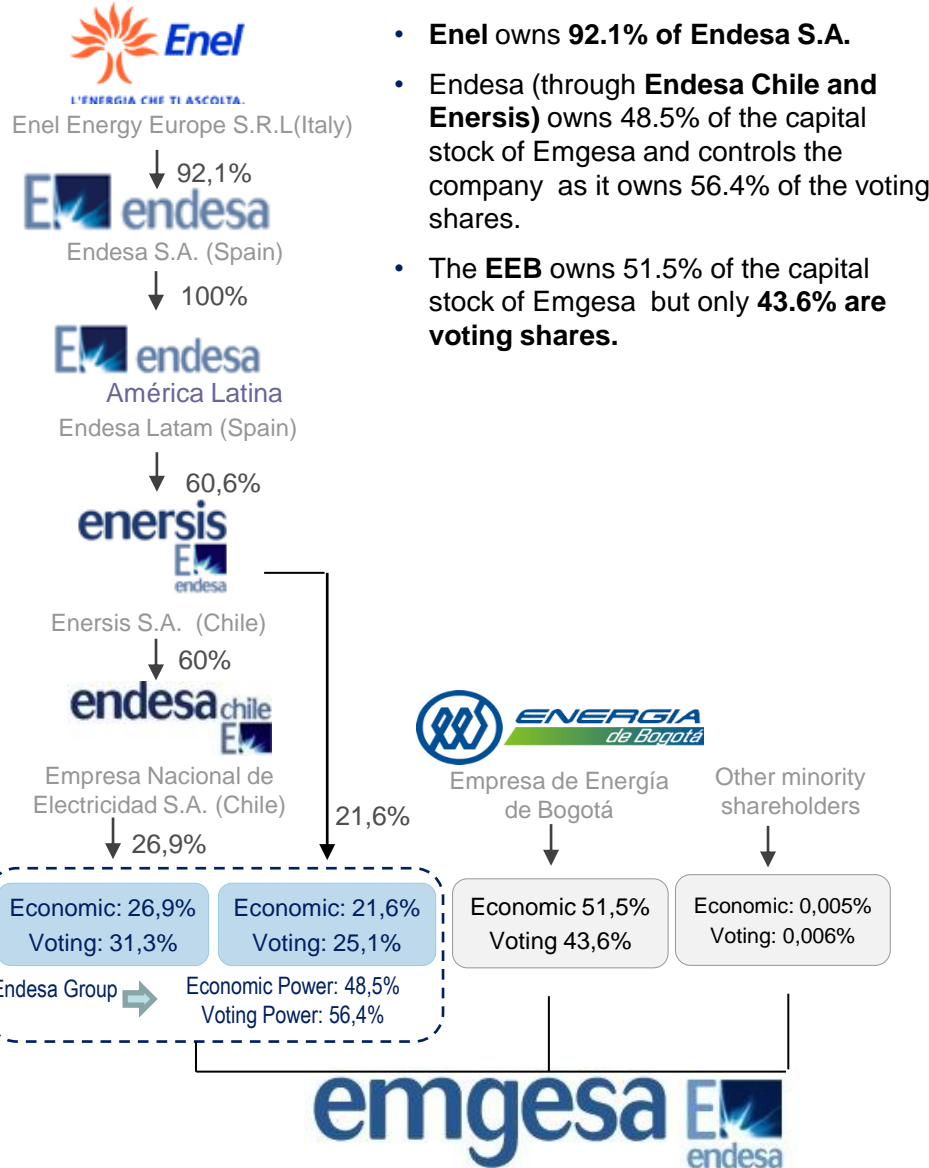
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Visit our web pages for additional information:  
**[www.emgesa.com.co](http://www.emgesa.com.co) / [www.codensa.com.co](http://www.codensa.com.co)**

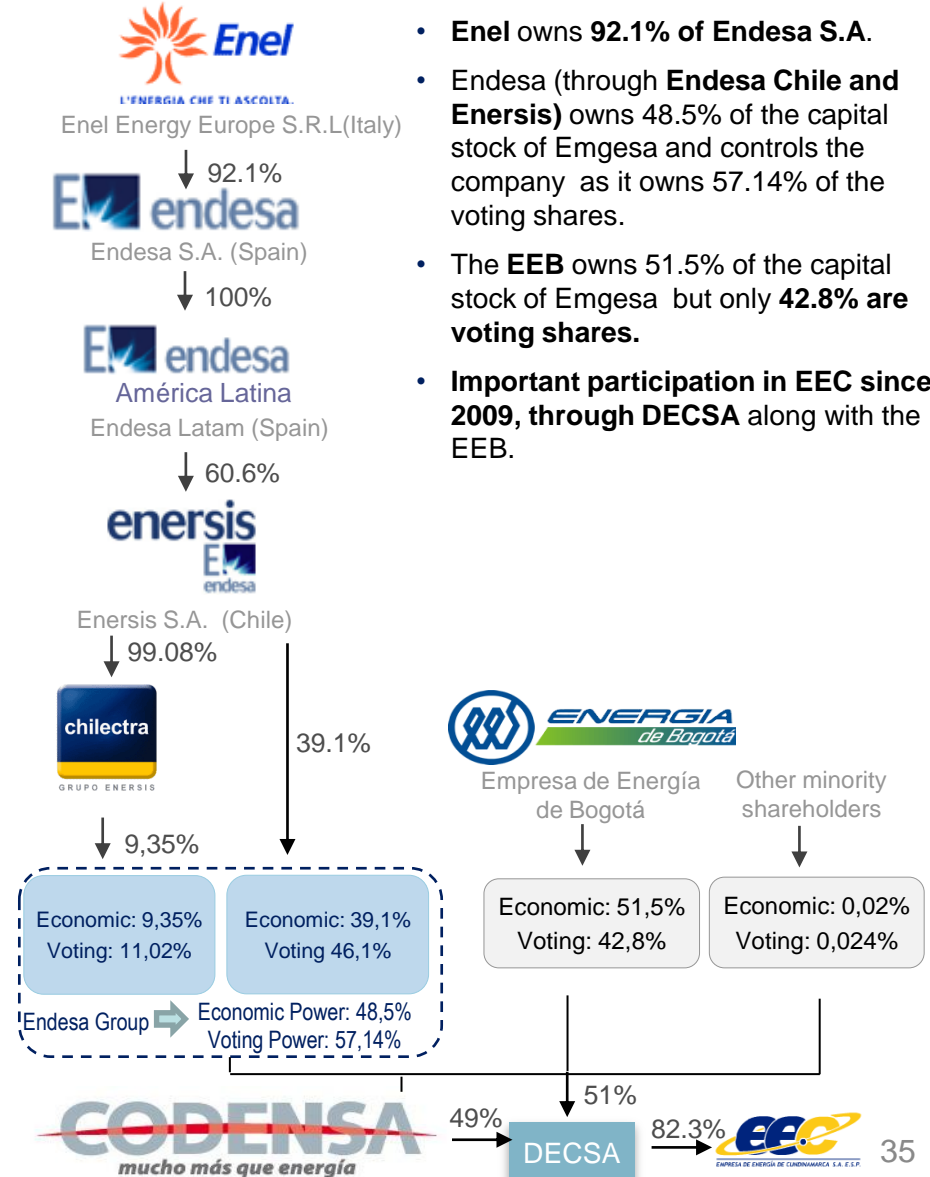
# Ownership structure of Emgesa and Codensa

Solid and reliable controlling group

## Emgesa



## Codensa

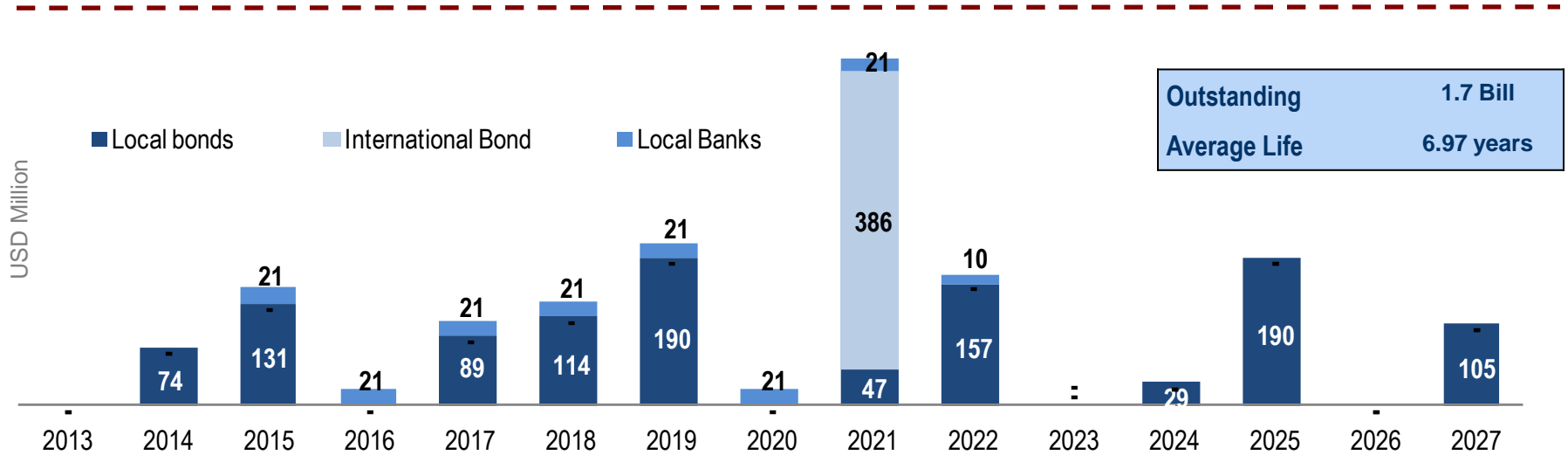


Moderate amortization profile despite new projects development

## Amortization Schedule

(MM USD) as of September, 2013

EBITDA (2012) ~ USD\$781 Million



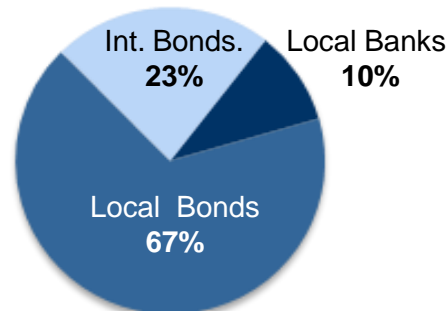
## Financial Debt Breakdown\*

as of September, 2013

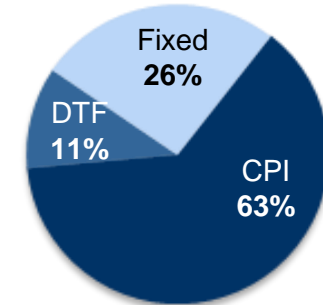
### Currency



### Instrument

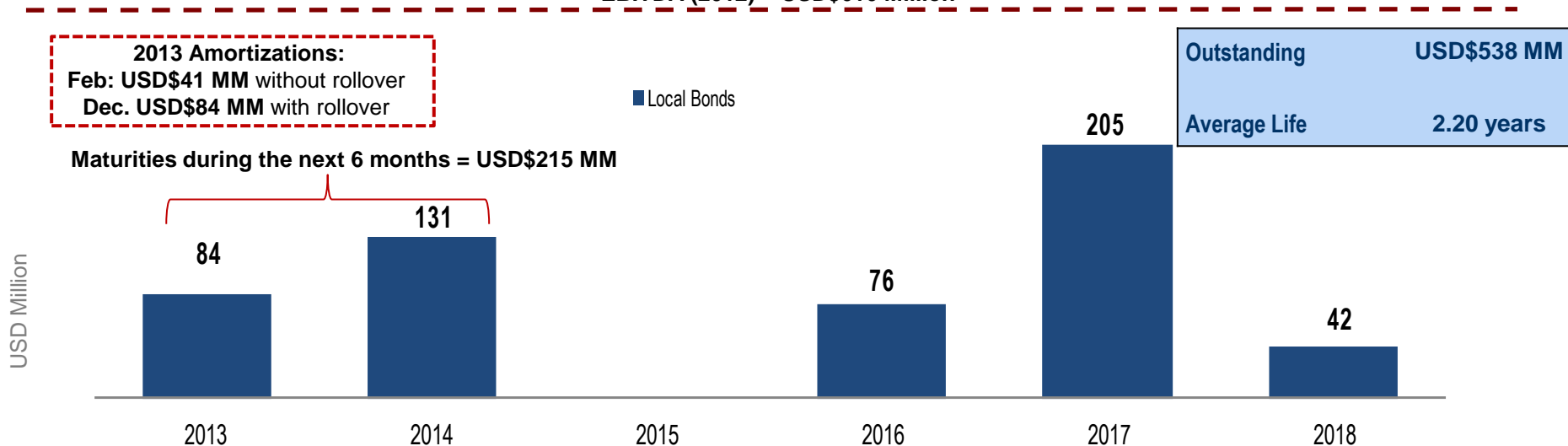


### Interest Rate



## Amortization Schedule (MM USD) as of September 2013

EBITDA (2012) ~ USD\$616 Million



## Financial Debt Breakdown

as of September, 2013

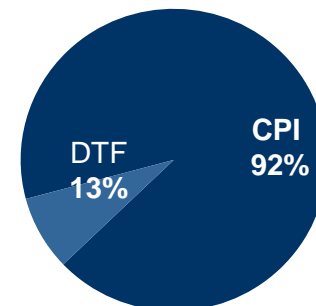
### Currency



### Instrument



### Interest Rate





*luz · gas · personas*

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