

New Energy Business Development

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Ence Investor Day 2015

19th November 2015



Agenda

- 🌿 **Biomass Energy in ENCE**
- 🌿 **Why Biomass Energy? Why in ENCE?**
- 🌿 **Where? Consolidate locally and push for a global presence**
- 🌿 **Analysis of opportunities**
- 🌿 **CAPEX and Development Plan**
- 🌿 **Conclusions**

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Biomass Energy in ENCE

- We are leaders in biomass energy generation (>200 MW*), with decades of experience, strong development and engineering teams, and complete value chain expertise, in order to guarantee success.



Mérida 20MW



** All biomass power (cogeneration and generation) included*

Biomass Energy in ENCE

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Huelva 50MW



** All power (cogeneration and generation) included*

Biomass Energy in ENCE

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Huelva 41MW



** All power (cogeneration and generation) included*

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Why Biomass Energy?

- **Sustainable modern energy for a modern world:** by 2040, the world's new power requirement will be 7 200 GW*, with a yearly sustained effort of \$740.000 M (total final of \$18,5 bn), increasing 35% annually from now. Nearly 60% of this new capacity will come from Renewable Energy.
- **Biomass will play a large part in this. Why? Because ...**
 - Biomass-to-power is the only renewable that is firm and dispatchable;
 - Biomass is abundant;
 - Creates rural jobs (>50x other RE's) and invigorates local economies, garnering strong support from governments, community ... and investors;
 - Beneficial to environment: CO₂ neutral, keeps forests and fields clean.
- **ENCE has a proven track record in developing, building and operating biomass power plants.**

** Source IEA 2015*

Why in ENCE?

- **Makes sense:** reducing cash cost of cellulose operations (in Spain), while continue strengthening our EBITDA with a stable source of income (will not accept market price variability);
- **Knowledge:** with an energy that is inherent and intimate to our expertise, a field where we are leading experts.
- **Social responsibility** to future generations to contribute to this revolution. ENCE is an expert in generating a firm, dispatchable, CO₂ neutral source of clean energy.
- **Opportunity:** ... and because there is a clear opportunity for ENCE.
 - High entry barrier for other companies.
 - Low-risk approach (non-recourse finance in stable markets).



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Where? Consolidate locally and push for a global presence

Spain:

- Government has successfully addressed **the energy deficit** (from -€5 000 M to +€650 M)...
- ... which has created a **stable environment for energy development**.
- Spain still far from European Energy Directives regarding RE for 20% by 2020 (**15,4%** en 2013, little change today). 6 600 MW needed*.
- ENCE has extremely deep knowledge of market. We are market leaders. There is clear opportunity in Spain, ENCE should lead it.
- Government to **launch tender** under RD 947/2015.

** Government estimation*

Where? Consolidate locally and push for a global presence

International markets: strong stable markets, with high energy needs, high energy prices, where biomass makes sense.

Return	High international IRR: 15% to 20% depending on country
Leverage	< 5x EBITDA
Country strength	Stable investment environment: Investment grade (BBB or higher)
Market size	>100MW (> 3 - 4 plants)
Biomass	Available (logistics), abundant, in-price, secure/diversified (% of energy crops + % agro waste + % forestry)
Stability energy market	FiT / PPA that make sense, where tariffs are sustainable and not uncoupled from base energy generation price
Partner	Well-positioned, strong partner to help us navigate local reality. Helps de-risk equity investments, and creates opportunities.

Wide range of opportunities in carefully selected countries: **Chile, Colombia or India.**

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Analysis of international opportunities: LATAM

Chile

- 20 GW of installed power and growing. **High demand for renewables, backed by Governmental policies.** Country needs energy to continue growth.
- Solar and wind have been strongly developed, but **firm energy is needed** as a back up.
- Available biomass** in the south of Santiago. Much still being burned in fields.
- Upcoming tender of 12,000 GWh.
- Partner: in negotiation (owners of forestry & agro + crop management).



Target IRR Chile \geq 15%

Colombia

- Colombia's energy mix **highly dependent on hydro** (affected by El Niño phenomenon).
- Government is strongly pushing policy to increase non-hydro renewables (**Ley 1715**).
- We see a huge opportunity: **in associated water from oil extraction operations** (may be replicated around the world). Disposal + Energy + Environment + Brent = success equation.
- Partner: already in place with a **large industrial group**.



Target IRR Colombia \geq 19.3%

Analysis of international opportunities: ASIA

India:



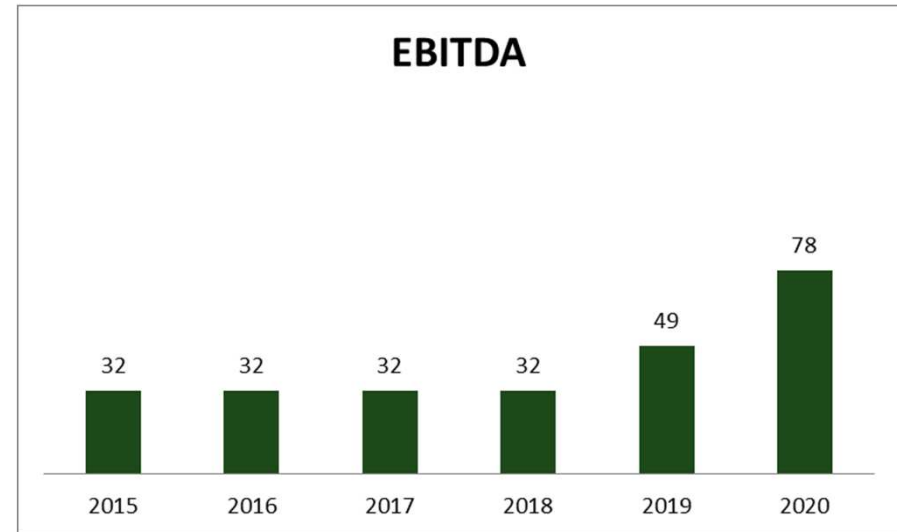
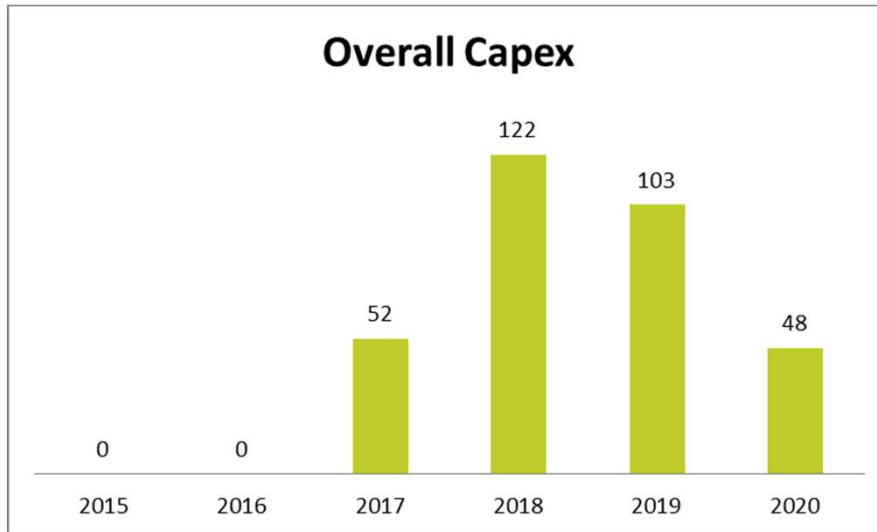
- India will account for a major portion of the growth in global energy to 2040.
- India has aggressively pushed renewables, and is increasing its targets.
- Opportunity in agro waste sector (especially sugar industry, where failing market pushes mills to complement sugar production with energy, ethanol). India is the 2nd largest sugar producer in the world.
- Bagasse and straw** to cogenerate (steam + energy to mill, excess to grid). 4GW already in place, 7 GW available, to be developed.
- Partner:** ongoing (interest from strong local parties).

Target IRR India \geq 20.26%

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CAPEX and Development Plan



- Development of Spain and International projects ongoing.
- Construction to start in 2 years time.
- A **€325M investment** will materialize in additional **€78M annual EBITDA** by 2020.

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Conclusions

- We see **biomass developing strongly** over the next 5 years, and ENCE stands out in the field with deep experience in the complete value chain, from fuel management to kWh sales.
- Biomass is an **attractive business**, that generates attractive returns for the company. A **€325M investment** will materialize in additional **€78M annual EBITDA** by 2020.
- Strategy: **consolidate locally**, and sensibly **push globally**.
- We are working in Spain and abroad in several high-value projects; with **strong partners** that help us **de-risk investments**, while creating **opportunities**.

Thank you

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