Biomass 2013

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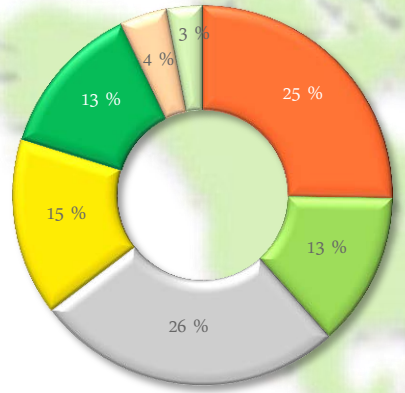
Manager Institutional Relations

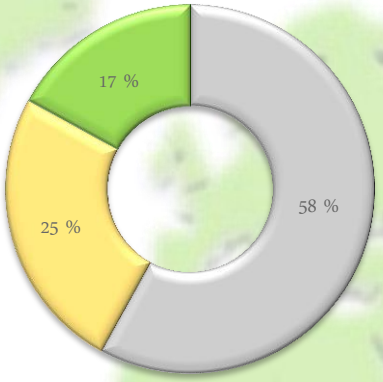
Abengoa (MCE: ABG) is an international company that applies innovative technology solutions for sustainable development in the energy and environment sectors, generating electricity from the sun, producing biofuels, desalinating sea water and recycling industrial waste.

Sales 2012



€7,783 M

EBITDA 2012



€1,246 M

Regions

- Spain
- Brazil
- USA
- Rest of Europe
- Rest of Latin America
- Asia & Oceania
- Africa

- Engineering and construction
- Concession-type infrastructures
- Industrial production

Sales

€7,783 M

↑ 10 % (€7,089 M in 2011)

EBITDA

€1,246 M

↑ 13 % (€1,103 M in 2011)

Net income

€125 M

↓ 51% (€257 M in 2011)

Net corporate debt – Corporate EBITDA

3.2x

↓ 3.4x since September 2012

Proprietary assets worth €11 billion distributed around the world

Net Fixed Assets* by region (€M)

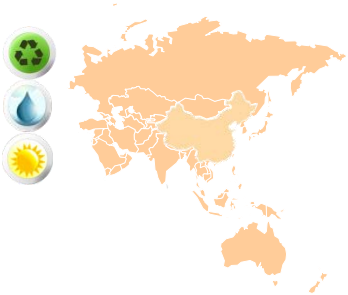
United States

€2,567 M

Rest of Latin America

€1,144 M

Asia & Oceania



€145 M

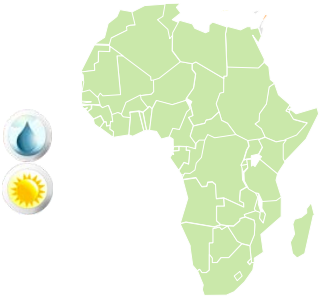
Spain

€3,428 M

Brazil

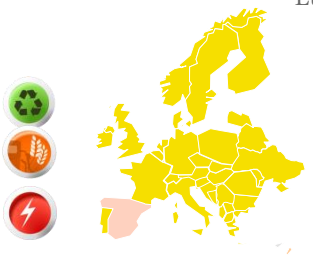
€1,893 M

Africa



€690 M

Europe



€1,054 M

Mexico

€590 M

Our diversified portfolio of assets gives us a stable base that allows us to leverage our local presence and international experience

*Excludes goodwill

Industrial production

Biofuels

- Global leader in biofuels with a presence in the three main markets: Europe, USA and Brazil
- World leader in developing technology for producing 2nd generation ethanol

Recycling

- European leader in recycling zinc waste and treating salt slags
- Performs its industrial waste recycling activities at more than 30 facilities in 12 countries

Solar

- World leader in concentrated solar power technology, both tower technology and parabolic troughs

Production capacity

3,175 million liters of ethanol

Recycling capacity

2.4 million tons of steel dusts and aluminum

Leader in high growth markets → we continue to grow despite the complex economic environment

Biofuel Capacity = 380 MG/1440 ML
Feed capacity = 980 Mt


York, NE


Colwich, KS


Evansville, IN


Ravenna, NE


Portales, NM


Granite city, IL

Biofuel Capacity = 395 MG/1500 ML
Feed capacity = 885 Mt
Cogen capacity = 119 MW


Cartagena, Sp


Coruña, Sp


San Roque, Sp


Salamanca, Sp

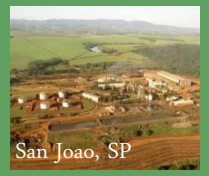

Lacq, FR

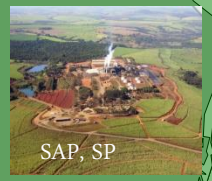

Rotterdam, NE

Netherlands
France
Spain
USA
Brazil

Biofuel Capacity = 50 MG/185 ML
Sugar capacity = 540 Mt
Cogen capacity = 140 MW


San Luis, SP


San Joao, SP

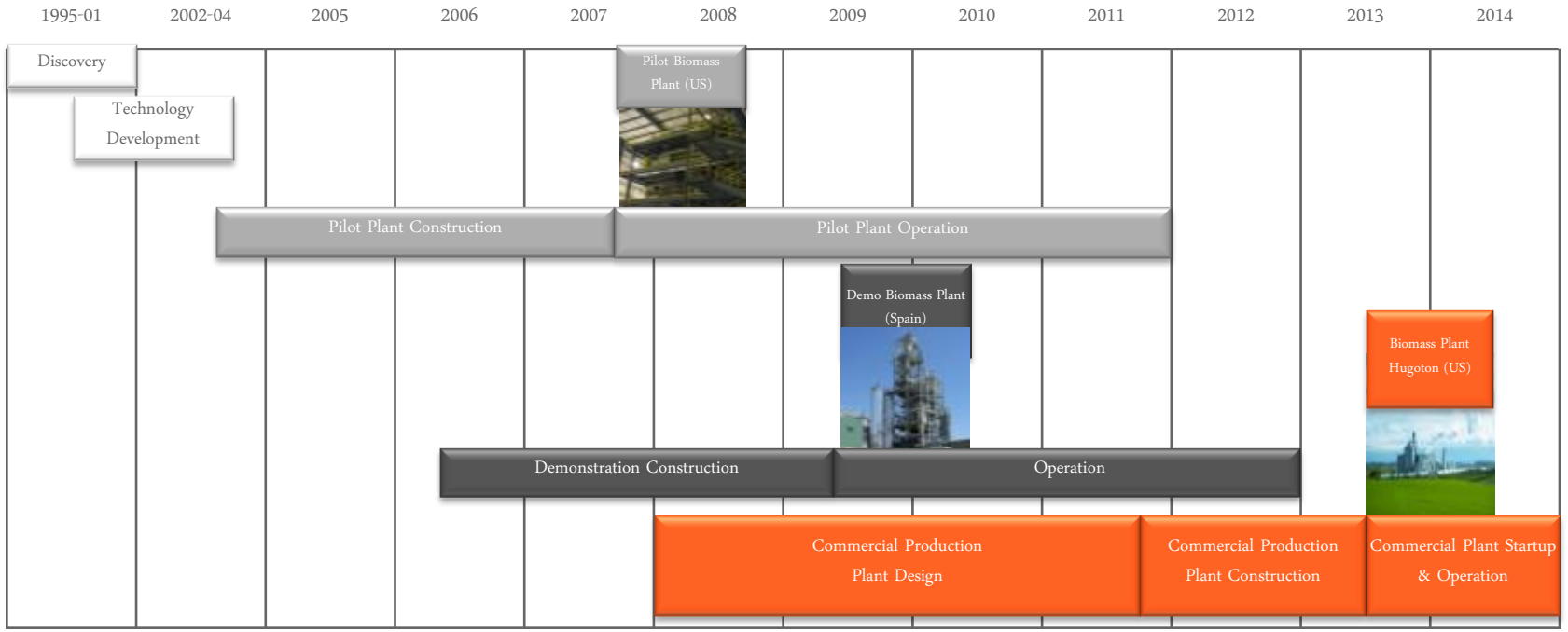

SAP, SP

Global

Biofuel	MG/y	ML/y
	825	3125
Sugar (KT/y):	540	
Electricity (MW):	259	
Feed (Mt):	1865	

Our journey to Hugoton

Hugoton is the culmination of 10 years of technology progress



- ✓ 10 years of technology development
- ✓ +100 people in R&D
- ✓ +26,000 hours of operation in pilot plant
- ✓ +4,000 hours of operation in commercial demo plant

Biomass logistics - outline

- Supply/availability/risks
- CHST/risks
- Market dynamics
- Interaction with grain facilities and potential leverage opportunities

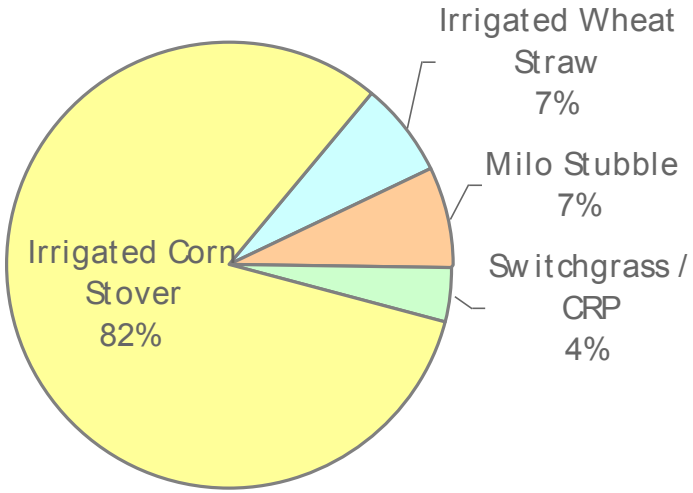
Feedstock Origination – Biomass within 50 mile radius

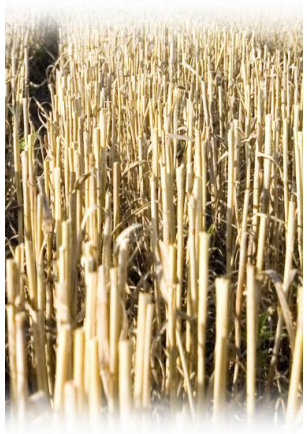
Crop	Acres (X 1,000)	Yield (Bu)	Residue (tons, X 1,000)
Corn	650	182	4,099
Wheat	2,308	39	3,069
Milo	589	64	1,298
CRP	1,707	n/a	6,830
Total	5,253	n/a	15,297

Biomass Feedstock

ABBK Biomass Feedstock Needs

- 320,000 "Dry" tons of biomass per year
- Estimated 150,000 – 200,000 acres of land





Irrigated Wheat Straw

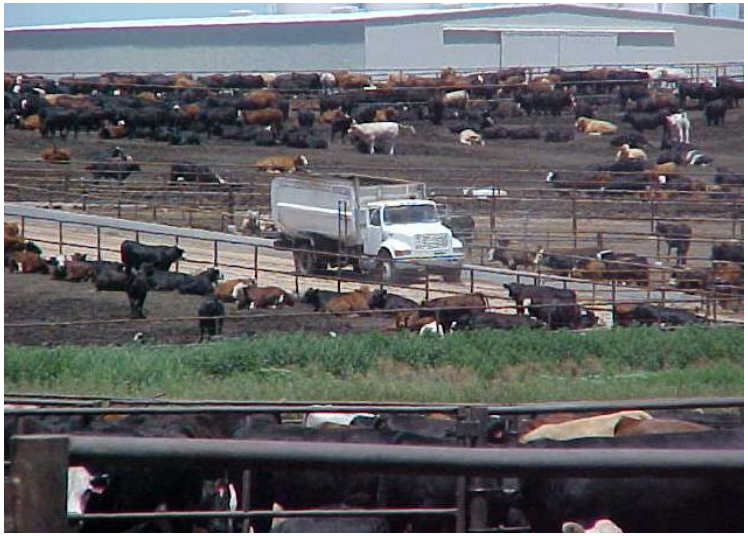
Milo Stubble

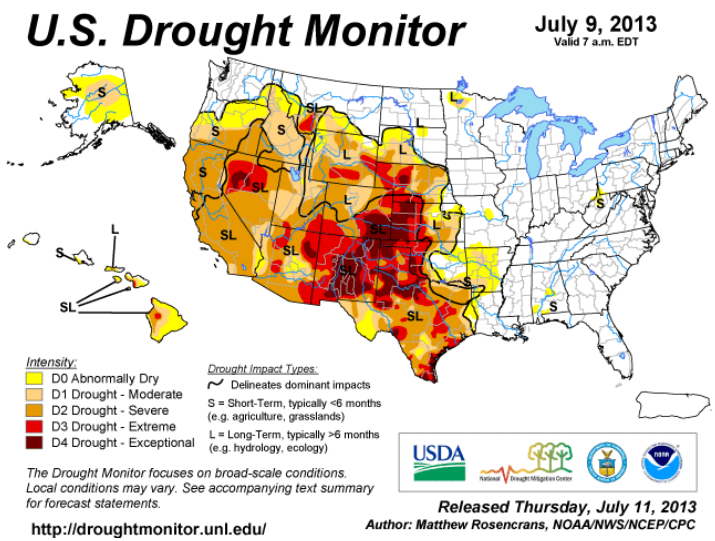
Switchgrass

Irrigated Corn Stover

CRP Grassland

- Supply Risks
- Weather
- Competitive uses
- Farming practices





CHST

Collection

Harvest

Field-siding

Field side stack

Transportation

Long term storage

Transportation

Plant for processing

- CHST Risks
  - Weather
  - Activity dependability
  - Unexpected events
  - Quality

Biomass Market Dynamics

- Market characteristics
  - Fixed supply Market
  - Crop residues represent additional income potential, however it is a small percentage of total income
  - Market maturity – somewhere between 1st and 2nd trimester of gestation

Biomass Market Dynamics

- Interaction with owners of biomass – relationship marketing principles
  - Stewardship principles
  - Synergies for biomass residue management and farming practices
  - Double crop strategies
  - Working within customary business practices

Interaction with grain facilities

- Pro
  - Grain facilities already have relationships with biomass owners
- Con
  - Biomass market represents a business segment they have traditionally avoided

Discussion

www.abengoabioenergy.com