

The Global Biotech Ethanol Company



1G

- Abengoa identifies need for renewable alternatives
- Acquisition of High Plains Corporation in U.S.
- 650 MI (170 MG) capacity in US and EU



1995-2001

2001-2003

- Lignocellulosic ethanol identified as strategic to cover future demand
- Enzymatic Hydrolysis technology selected as most promising one

2G

- Organic growth up to 1,000 ML (265 MG) capacity in US and EU



2002-2006

2004-2011

- R&D stages fulfilled:
 - York pilot plant
 - BCyL biomass demo plant
- R&D externally validated
 - DOE Grants
 - 3 Spanish Cenit projects
 - 16th major company within EU VII framework program
- Complimentary technology included in the portfolio
 - Enzymes & C5 fermentation
 - Bioproducts

- Acquisition Dedini Agro, Brazil
- Assets in 5 countries, three geographies
- Total 3125 MI (825 MG) capacity in operation
- Operating 6 cogen facilities (259 MW), with 2 of them powered by biomass (140MW)

2007-2011

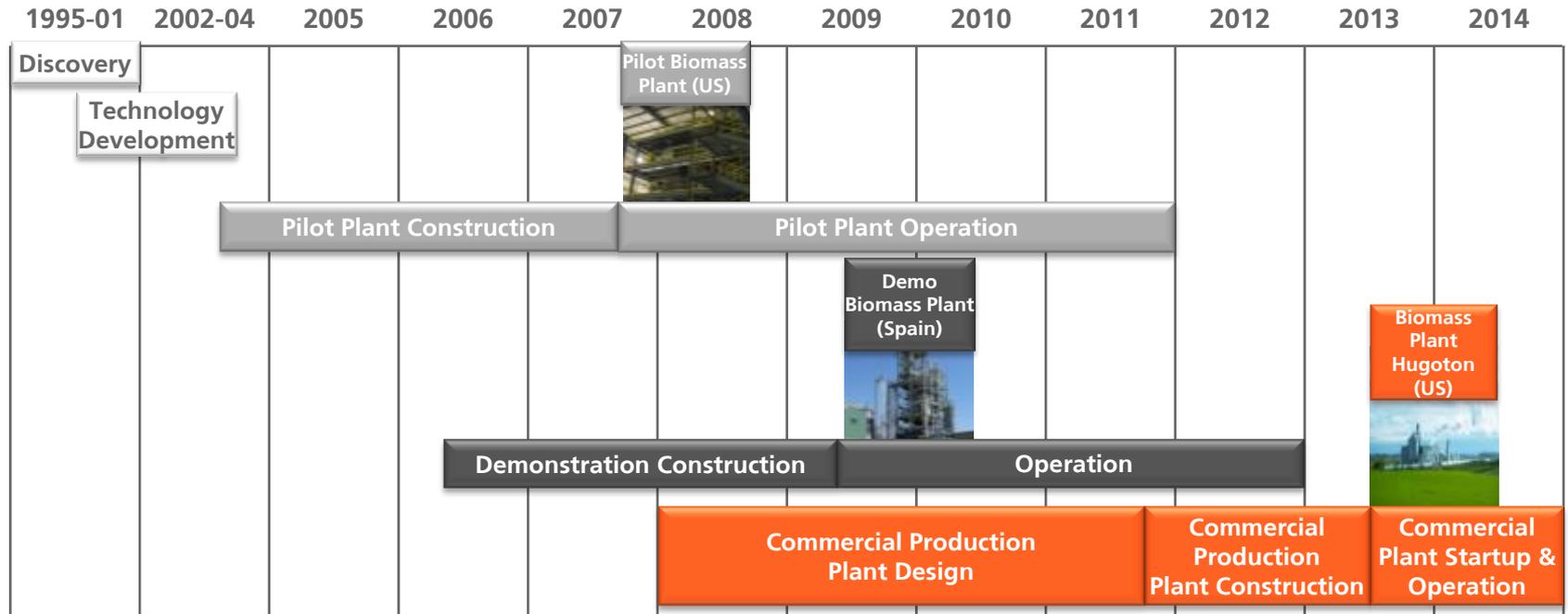
2012-2013

- First commercial-scale ethanol plant
- Technology license business
- O&M services
- Biorefinery as next goal



ABENGOA BIOENERGY

...making us pioneers in 2nd generation



- 10 years of technology development
- +50 patents ongoing
- +300 USD MM invested (>150 USD MM cofinancing DOE + EU)
- +26,000 hours of operation in pilot plant
- +4,000 hours of operation in commercial demo plant

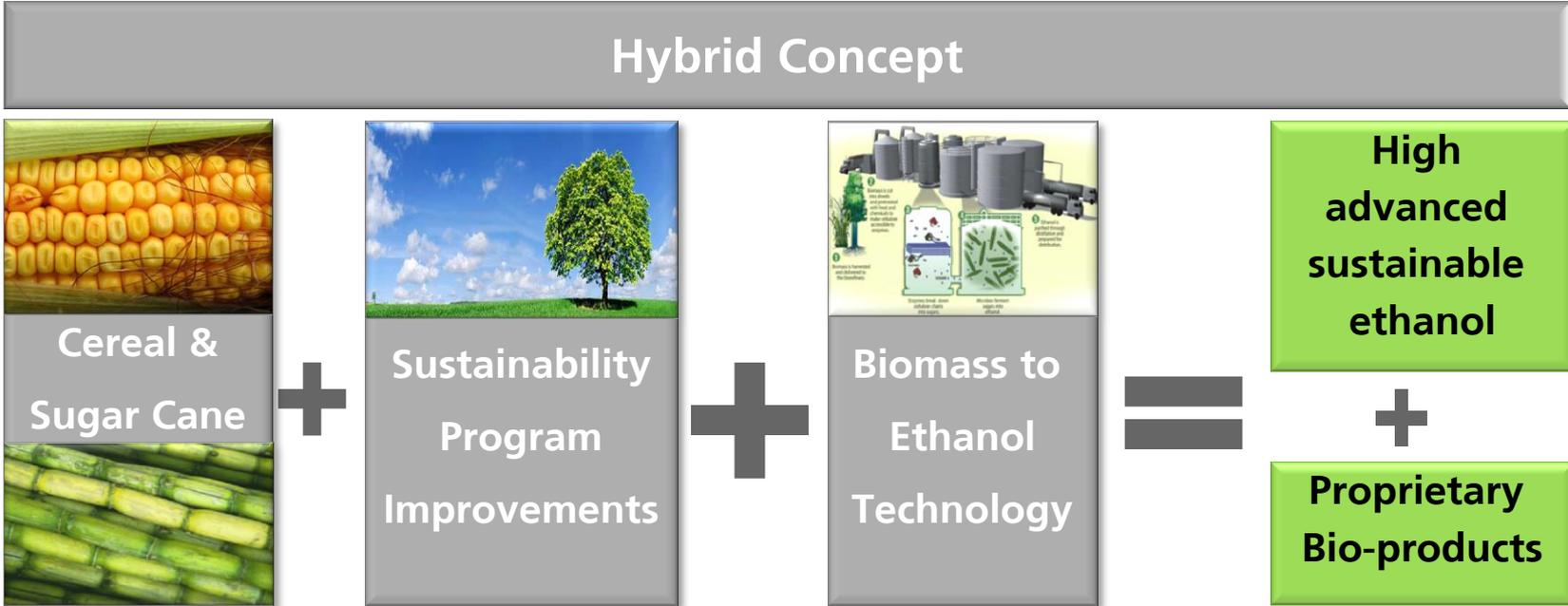
10 years of technology progress through Stage-gate process

ABENGOA BIOENERGY

We have integrated 1G and 2G platforms...

Develop IP biomass to ethanol technology

Abengoa Bioenergy Assets



Third Party

- License biomass technology
- License sustainable program applications
- O & M services
- Consulting services
- Engineering services

