VERENIUM

THE NATURE OF ENERGY™

Verenium Analyst & Investor Day

Kelly Lindenboom

May 28, 2008

55 Cambridge Parkway Cambridge, MA 02142 617.674.5300
www.verenium.com

Agenda

- Welcome and introductions
- “Rules of the road”
- Today’s schedule

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Today's Agenda

- Carlos Riva – Corporate Overview
- John Malloy – Biofuels Technology & Process
- Chuck Davis – Biofuels Commercial Development
- *Morning Q&A (15 Minutes) /* Break (15 minutes)
- Bill Baum / Professor Lonnie Ingram – R&D
- Janet Roemer – Specialty Enzymes Business
- John McCarthy – Finance Strategy
- *Q&A (45 Minutes)*
- Lunch & Plant Tour

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Forward-Looking Statements

This discussion will include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These statements involve a high degree of risk and uncertainty, and relate to matters such as the Company's future operating plans, markets for the Company's products, the Company's financial guidance for 2008, and financing matters. Such statements are only predictions, and actual events or results may differ materially from those projected in such forward-looking statements. Factors that could cause or contribute to differences include, but are not limited to, risks related to the Company's intellectual property, strategic partners and collaborators, competitors, and regulatory and market forces. Certain of these factors and others are more fully described in the Company's filings with the Securities and Exchange Commission, including, but not limited to, the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2008.

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Verenium: Building The Leading Next-Generation Ethanol Company

Carlos A. Riva

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Verenium Today: Two Commercially-Focused, Complementary Businesses

- Significant Market Opportunities
- Unmatched In-house "Know-How"
- Intellectual Property
- Infrastructure Development Skills

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Key Drivers for 2008

Commercial	• Mechanical completion, start-up and commissioning of demonstration-scale plant • Initial site pipeline • Increased enzyme product sales
Business	• New partnerships • Biofuels, enzymes, R&D • Strategic financing opportunities
Operational	• Cost controls

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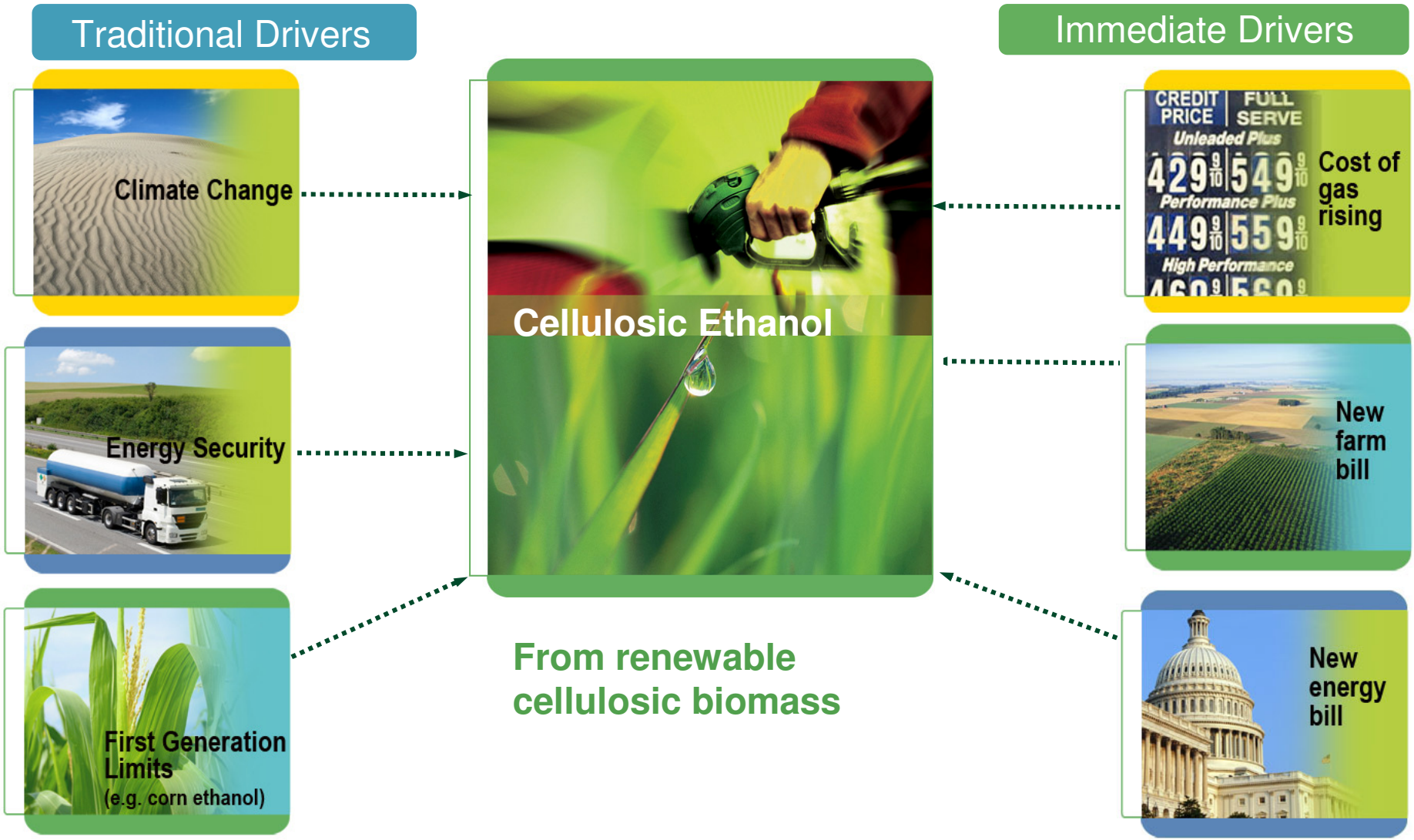
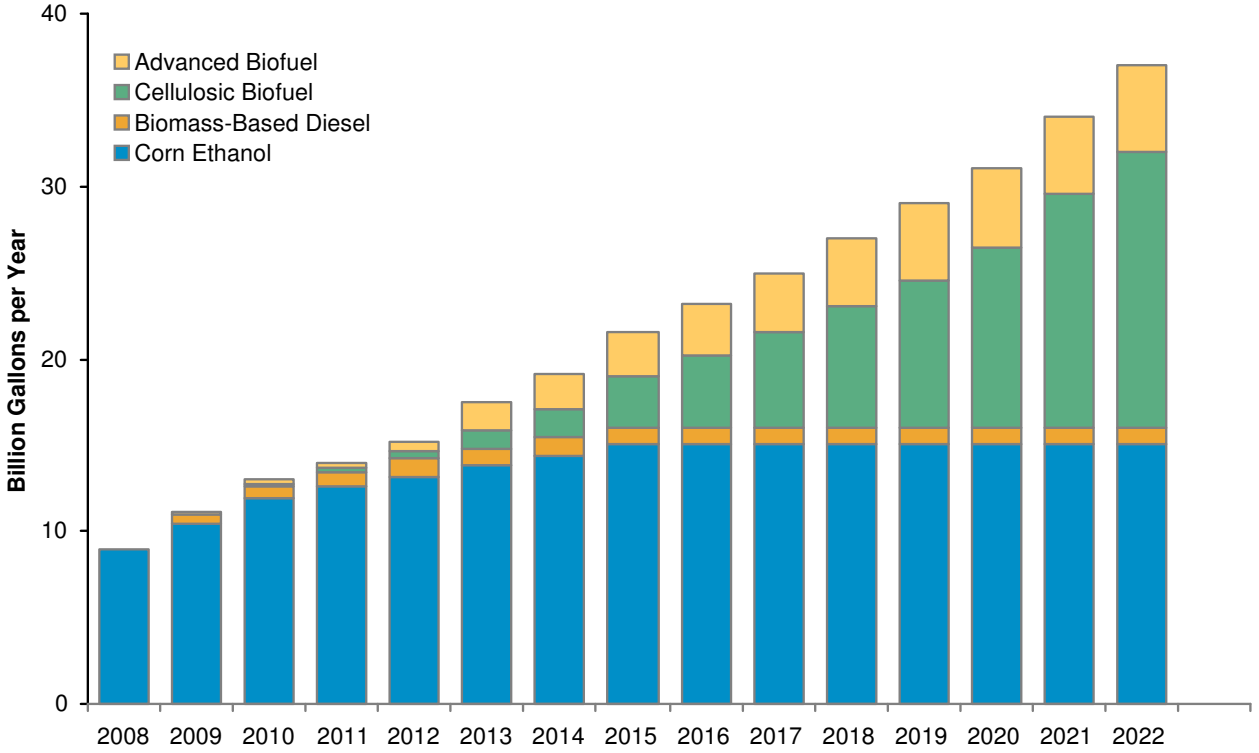
External Environment Continues to Support Next-Generation, Cellulosic Biofuels



The Opportunity: New Renewable Fuels Standard Mandates Cellulosic Ethanol Market

- Represents a multi-billion dollar, currently uncontested market opportunity
- Verenium expects to begin commercial production in 2011



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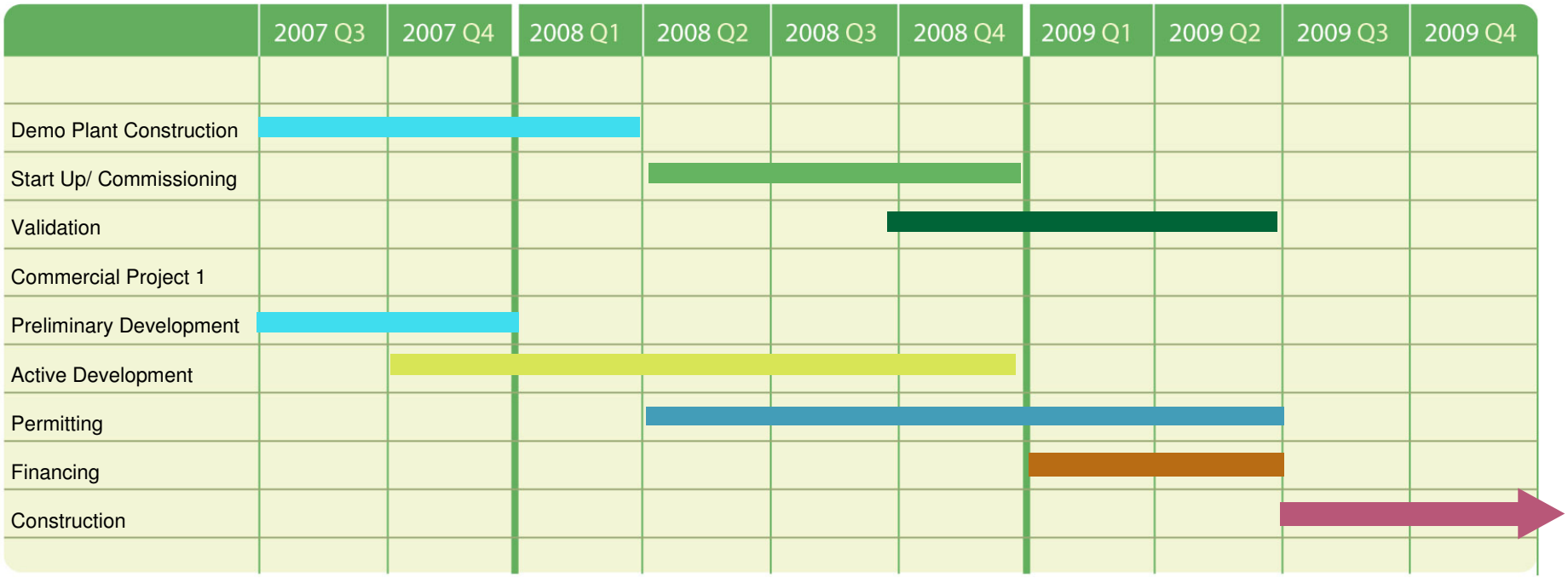
Delivering on the Vision: Corporate Priority is Getting to CP1



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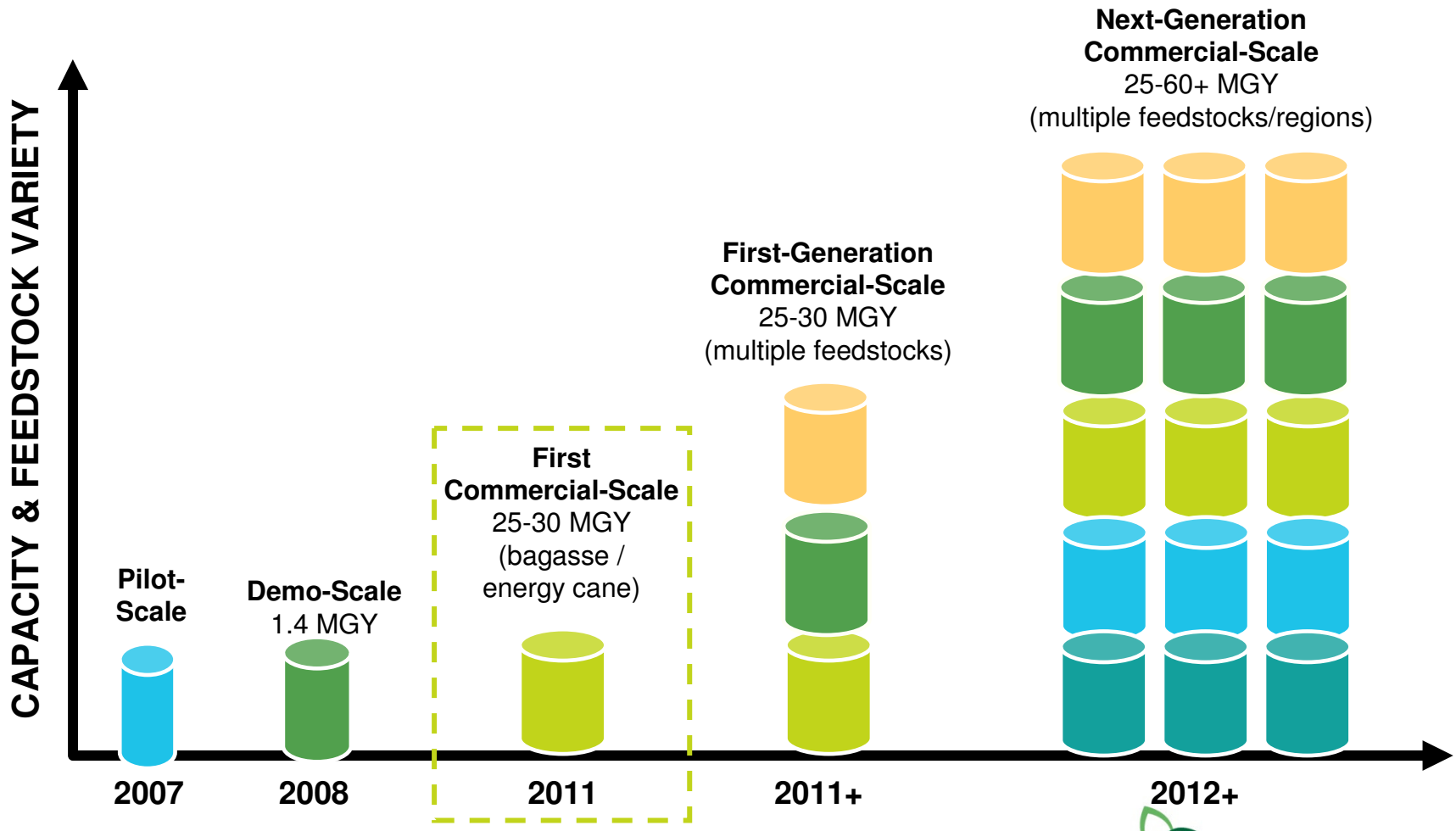
Biofuels Growth Strategy

Planning for rapid deployment of facilities following CP1



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Accelerating Commercial Growth: Strategic Partnerships

Biomass cultivation & logistics

Project-level Partners

Gene discovery, enzyme development & novel microbes

Engineering, finance licensing & partnerships

Assets & proprietary processes

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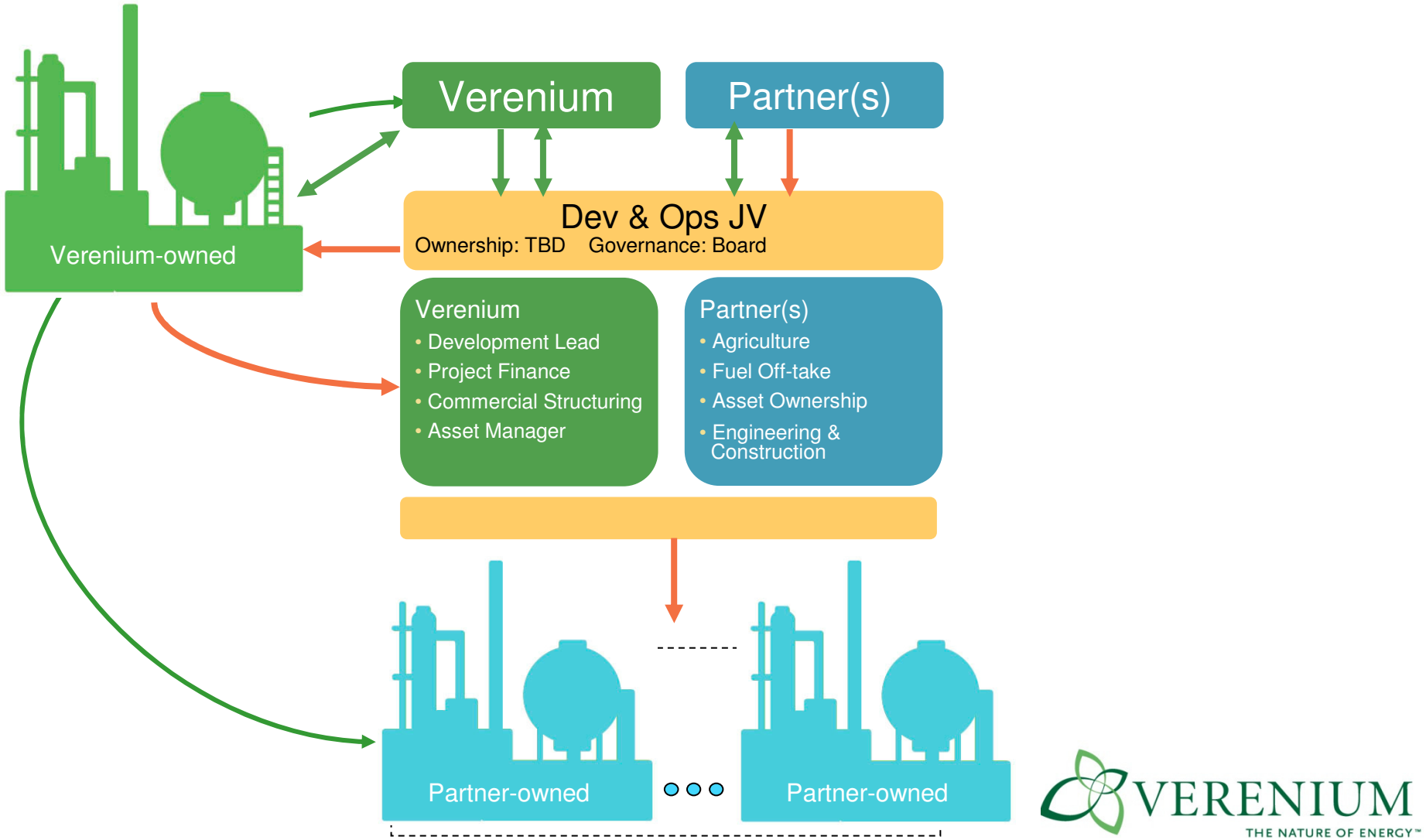
Ethanol from cellulosic biomass

Project-level Partners

Actively pursuing opportunities with like-minded, strategic corporate partners for the broad development of the cellulosic ethanol market

Potential Corporate Partnership Construct



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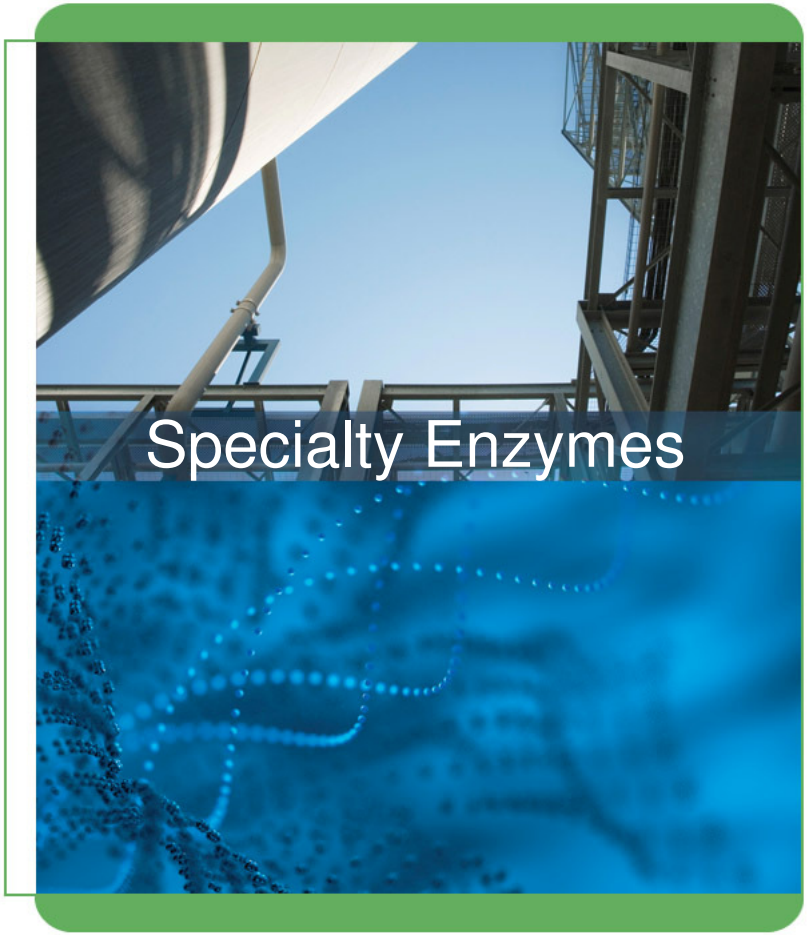
Significant Potential for the Enzyme Business



- Broad platform for accessing “cheap” sugars
  - Cellulosic enzymes
    - Complementary opportunity to cellulosic ethanol
  - Other important potential market applications
    - Fuels (butanol, jet fuel)
    - Biomaterials (plastics)
    - Other industrial products

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Vision for Verenium in 2013

- The leading cellulosic biofuels company
  - Established commercial fleet in U.S., expanding global reach
- Significant growth in specialty enzyme business with revenues ~$200M;
  - Sustainable product pipeline with near-, mid-, long-term growth opportunities
  - Enzymes supporting biofuels facilities
- New market-leading partners
- Strong financial base
- World-class organization

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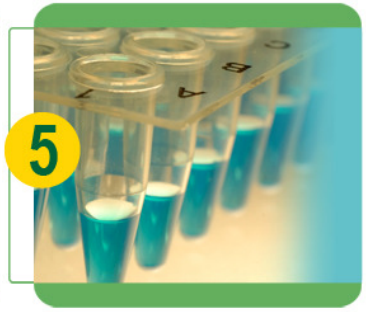
Realizing the Vision: Our Corporate Strategy

Exploit first-mover advantage in cellulosic ethanol production to become worldwide business partner, employer of choice

Build, own and operate cellulosic ethanol production facilities to maximize operational control, economic return for shareholders

Leverage global partnering / licensing to efficiently extend reach of technology & know-how

Optimize current leadership position in industrial enzymes by accelerating commercial focus , profitable growth opportunities



Extend leading-edge R&D capabilities across the value chain

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We Have the Team to Deliver

- Established, seasoned leadership across core functional areas
- Continue to focus on building an organization not for today's business – but capable of advancing our long-term vision
  - Blends of experience from various relevant sectors
  - Mix of business, engineering and related sciences

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In Conclusion

- On the cusp of delivering commercial-scale cellulosic ethanol
  - Expect to be the leading producer within 5 years
- External environment, including key legislation, greatly supports development
- Actively pursuing strategic partnerships to accelerate commercial growth

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The Drive To Commercial Plant #1: Biofuels Update

John R. Malloy, Jr.

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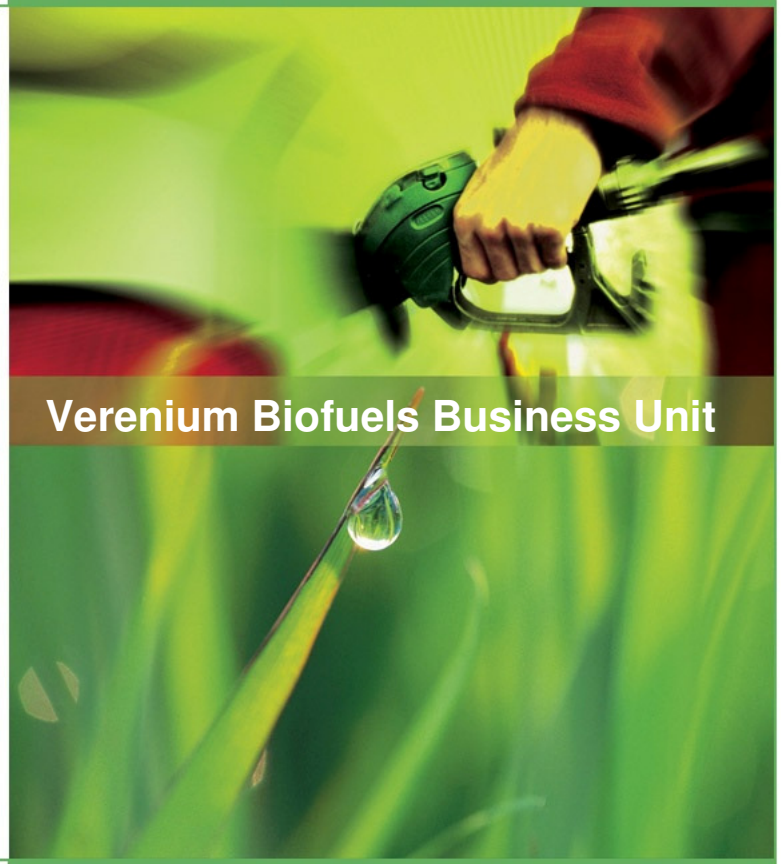
Overview



- Well positioned to lead this industry
- Demonstration-scale plant on track
  - Start-up ongoing, commissioning started
- Clear path to commercial plant #1
  - Groundbreaking next year
- Today:
  - Technology overview
  - Demo overview, plan to validate our technology

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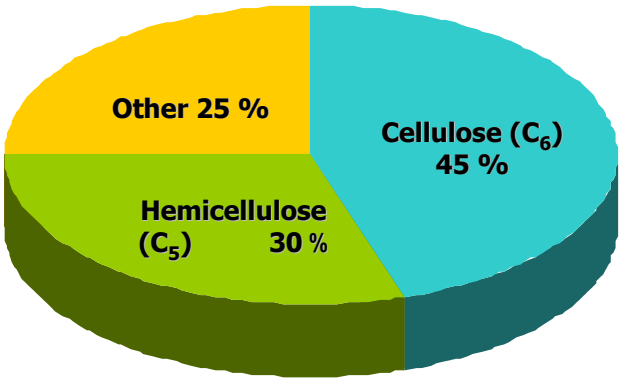
Biomass: Sugar Source for Cellulosic Ethanol



Composition of Sugar Cane Bagasse

- Objective is to produce cheap sugar and convert to ethanol
- Cellulose is the source of 6-carbon sugars (glucose); hemicellulose is the source of 5-carbon sugars (Xylose, etc.)
- Verenium's V5 and V6 fermenting organisms convert these sugars at high yields (target: up to 90 gallons/ton)
- Original V5 organism invented by Dr. Lonnie Ingram at University of Florida

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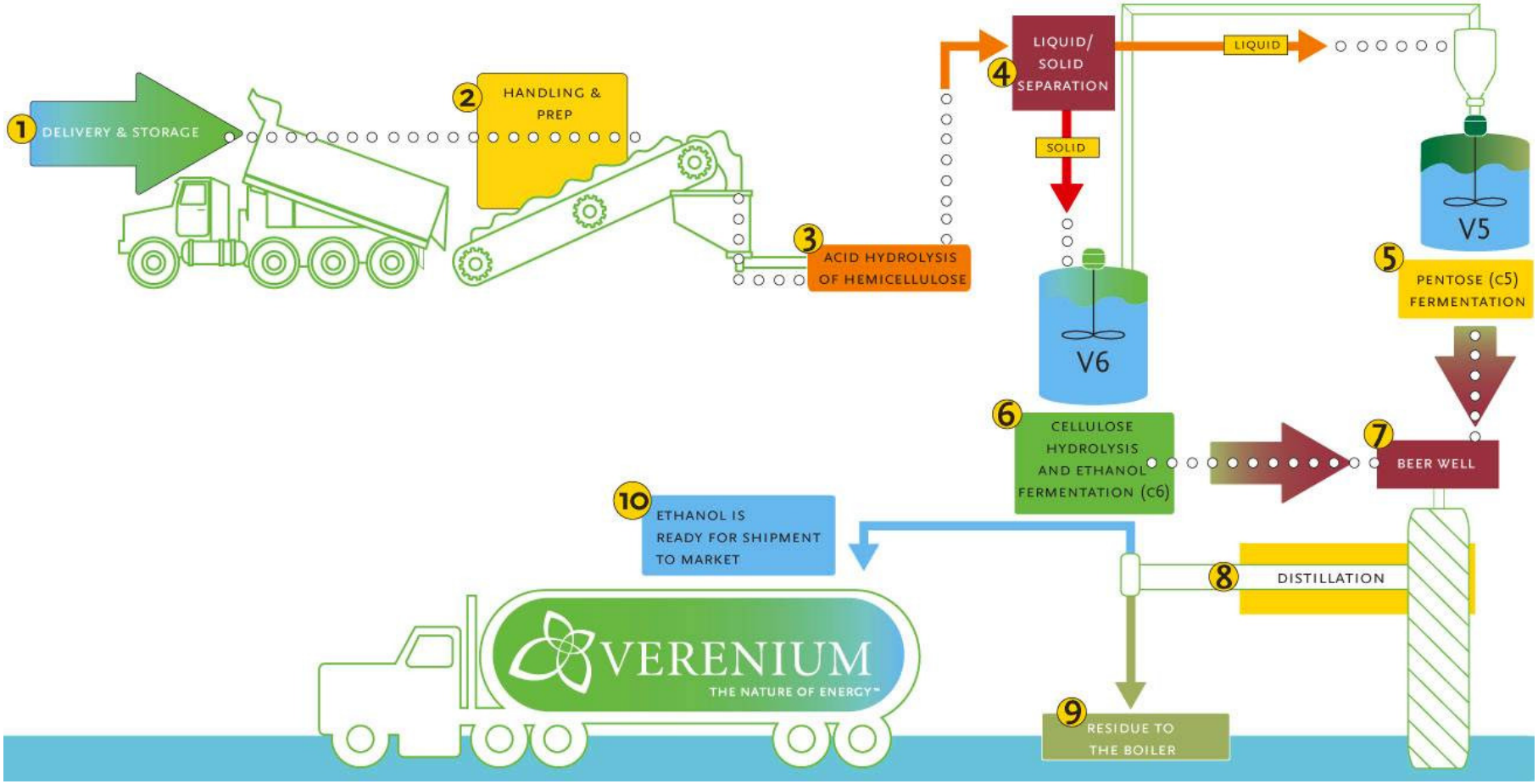
The Verenium Process: Getting to Ethanol



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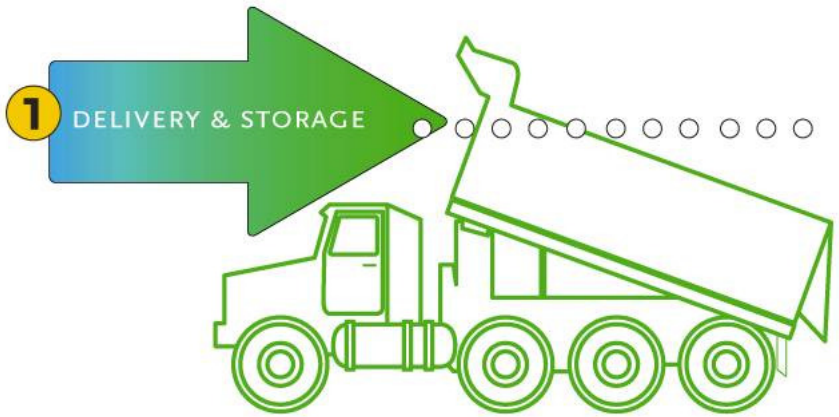
The Production Process: Delivery and Storage



Once delivered to site, we have a well understood process for managing the bagasse pile

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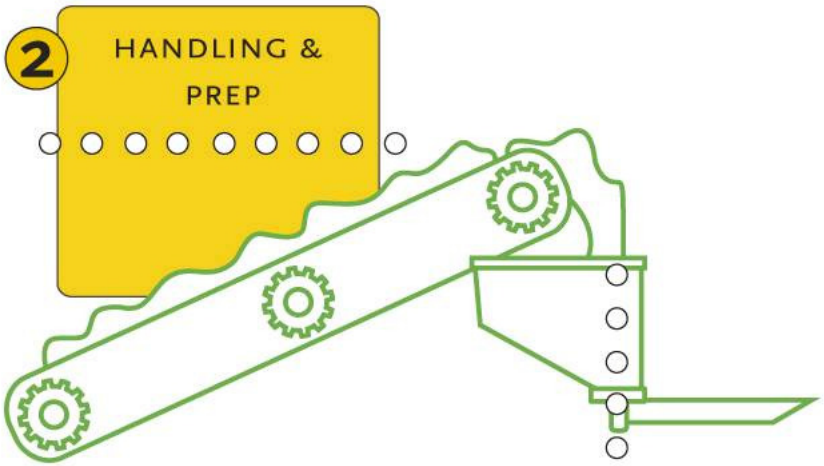
The Verenium Production Process: Handling & Prep



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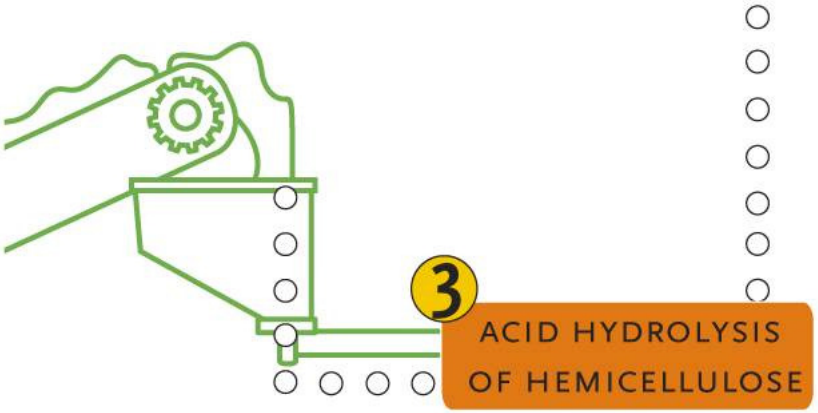
The Production Process: First-stage Hydrolysis



- Dilute acid steam explosion hydrolyzes hemicellulose to 5 carbon sugars and produces a cellulose “cake”
- Utilize “off-the-shelf technology” from pulp and paper industry optimized for our process

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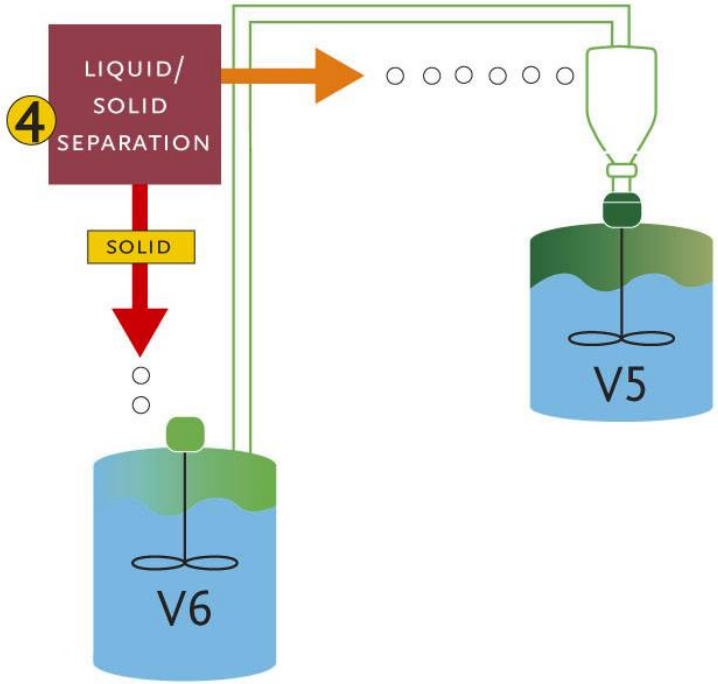
The Production Process: Liquid / Solid Separation



- Hydrolyzed bagasse (mixture of C5 sugar syrup and cellulose fiber) sent to liquid/solid separation system where C5 sugar syrup is washed and separated from cellulose fiber
- C5 syrup sent to C5 Fermentation process
- Washed cellulose (C6 cake) sent to C6 fermentation process

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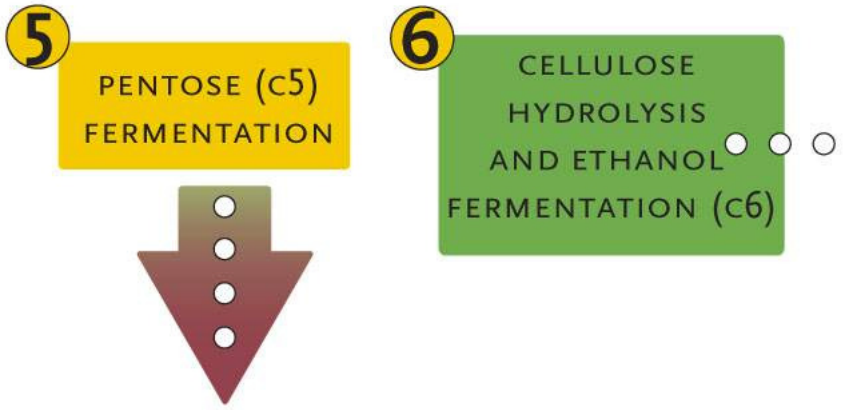
The Production Process: Fermentation of Mixed Sugars



Two organisms for fermentation:

- V5 for C5 fermentation
- V6 for C6 fermentation
- Saccharification of cellulose by enzymes produced on-site

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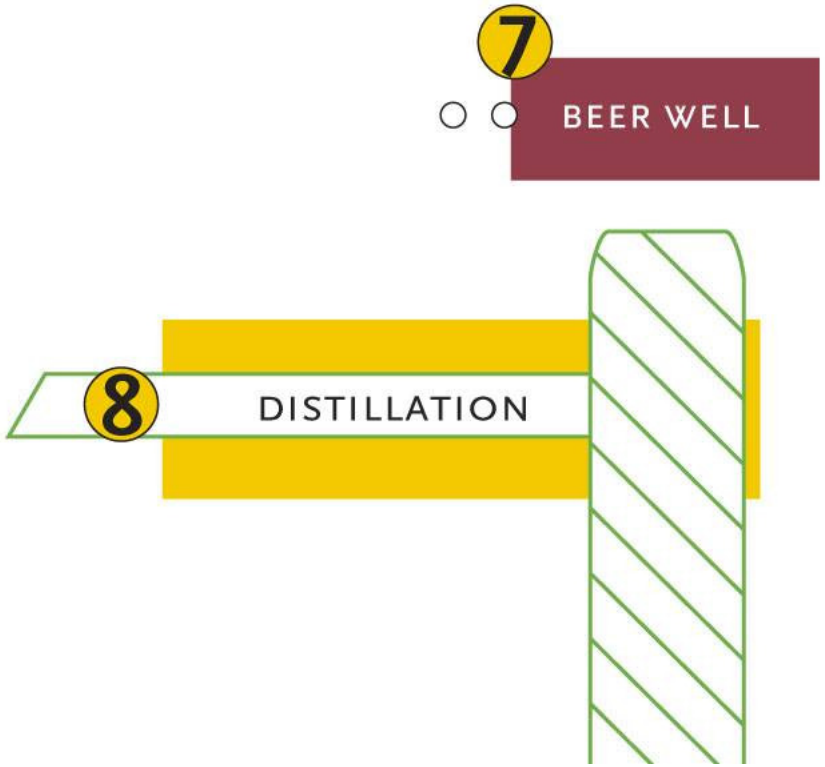
The Verenium Production Process: Distillation and Stillage Processing



C5 and C6 “beers” blended and stored in a “beer well,” then run through traditional three-stage distillation process (stripping, rectification, and dehydration) to produce fuel grade ethanol

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Feedstock Strategy

- Initial focus is sugar cane bagasse and energy crops
  - High yielding
  - Readily available in the southeast U.S.
- Long-term strategy:
  - Feedstock agnostic
  - Facilities around U.S. usually locally-sourced, low-cost feedstocks

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Ethanol Yields by Feedstock / Technology

Energy Cane...

- Compositionally the most similar to sugar cane bagasse
- Among the highest yielding agricultural feedstocks offering significant yield and cost advantages

Feedstock	Technology	Ethanol Yield Gallons / Acre	Ethanol Yield Tons / Acre
Energy Cane - FL	Cellulosic	1,830	20 dry tons
Switch Grass – U.S.	Cellulosic	732	8 dry tons
Sugar - Brazil	Sugar Fermentation	653	4.82 tons (sucrose)
Sugar – U.S.	Sugar Fermentation	493	3.64 tons (sucrose)
Corn – U.S.	Grain – Dry Mill	402	4.2 wet tons*

(*based on 150 bushels/acre average @ 56 pounds/bushel)

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Demonstration-scale Plant Overview & Status

- 1.4 million-gallons-per-year cellulosic ethanol facility
- Plant will demonstrate the complete process
- Mechanically complete, currently well into start-up mode, and commissioning has begun!
- Will initially test bagasse and energy crops; designed to handle a wide array of feedstocks

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Path to CP1: Start-up, Commissioning & Optimization

Startup: Q1-08
Well underway

- Prepare plant to accept feedstocks
- Verify plant operability: run motors, check instrumentation and controls, confirm operations ready
- Targeting 100% Q3
- Completed areas include:
  - Plant utilities
  - Bagasse handling
  - Hydrolyzer
  - Liquid/solid separation systems

Commissioning: Q2-08
Just beginning

- Process feedstocks through facility
- "Making it work"
- Validate process, biology at commercial scale
- Initially operate individual systems, then move to integrated plant operations
- Produce ethanol

Optimization: 08-09+
Long-term strategy

Critical performance targets:

- Sugar production & recovery
- V5 & V6 ethanologen performance
- Yield of C5 and C6 ethanol per ton of feedstock
- Enzyme production levels in TR1 production system
- Enzyme dose required per gallon

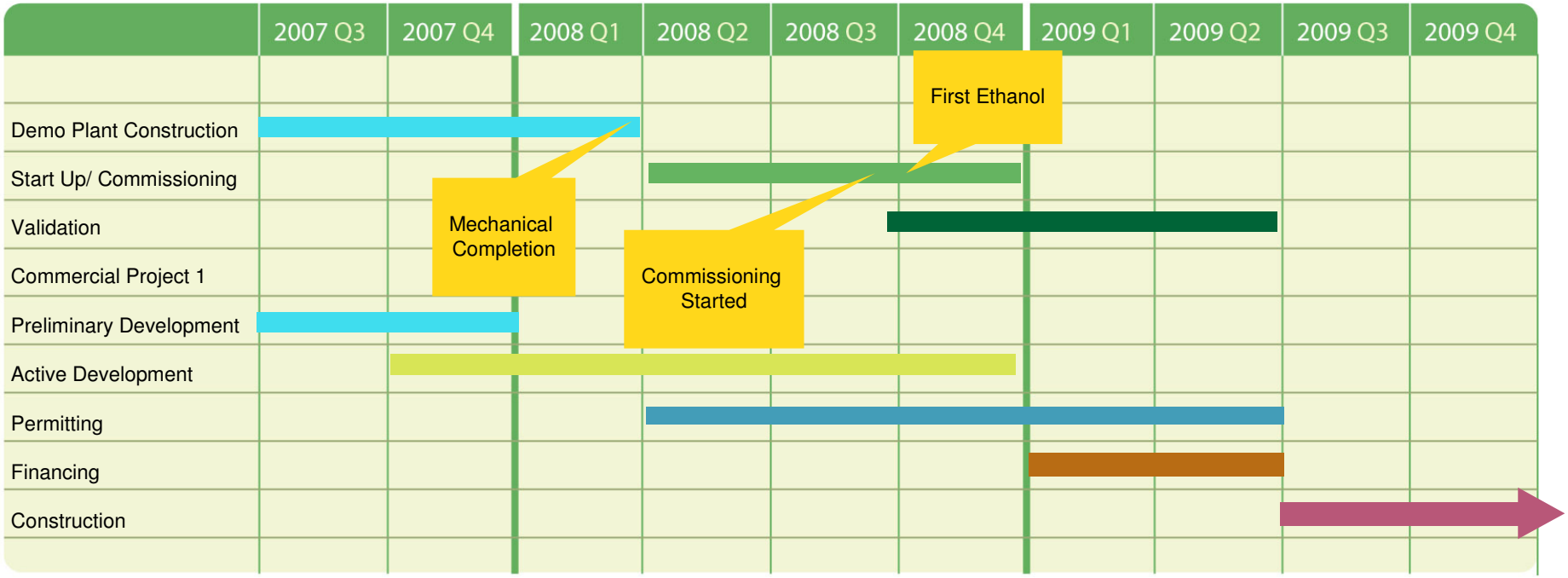
Key economic targets:

- Nutrient costs per gallon
- Enzyme cost per gallon
- Utilities costs
- Production cost of a C5 & C6 gallon

Cost Reduction Programs:

- Programs underway to drive down production costs for CP1 and beyond
- Example: enzyme production significantly costs lowered

Key Validation and Other Biofuels Milestones



- Well positioned to be the industry leader
- On track for CP1 groundbreaking next year

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Preparing the Market: Biofuels Commercial Development

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Biofuels Commercialization Strategy

Commercial development team creates *bridge* to operating businesses

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Commercial Development: Near-term Focus on Gulf Region

- Ultimately national / global play; Gulf region is first leg
- Initial focus: position 6 projects for close between 2009 and 2011

Common themes	Critical activities	Resources
• 30 MGY • Primarily dedicated energy crop (cane/grasses) • Well located from perspective of feedstock and off take	• Feasibility • Permitting • Feedstock supply agreements • Commercial • Financing	• Team with deep experience in energy infrastructure / agriculture • Draw upon Verenium technical team for permitting inputs

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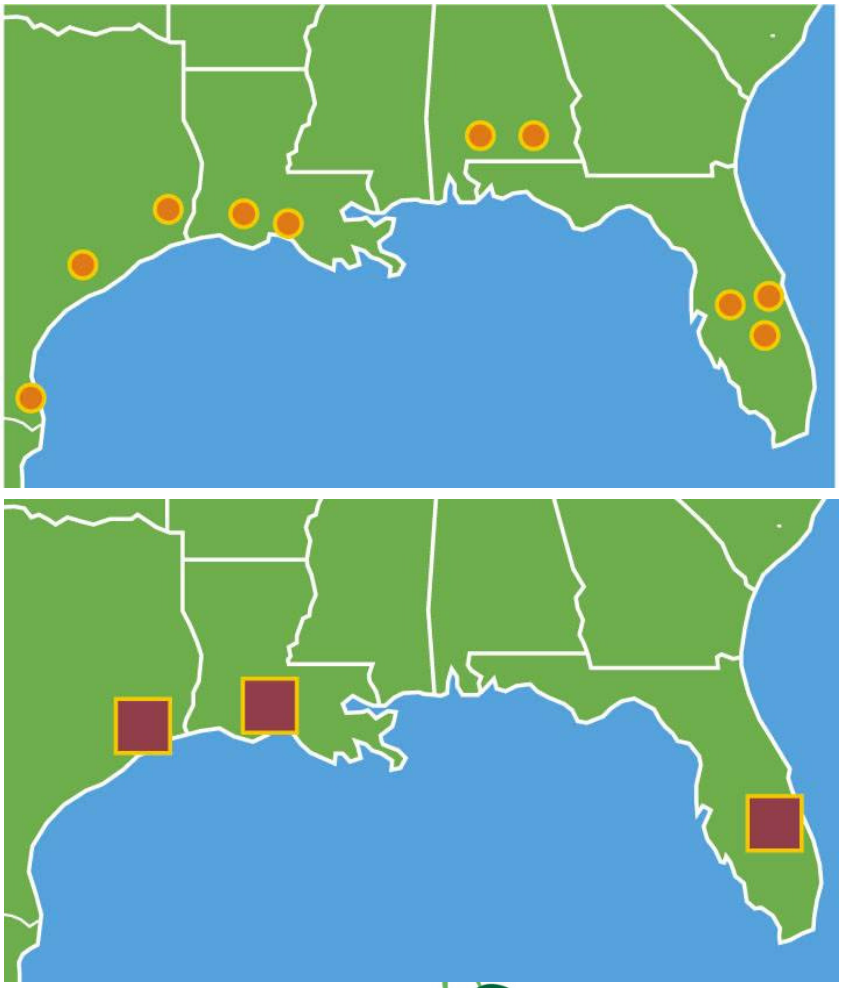
Gulf Region Development Highlights

- Projects in Development:
  - Grasses/energy cane/bagasse
  - Local agricultural partners
  - Good logistical interfaces
  - Some co-located

- Three energy crop plantations
  - ~100 acres / plantation
  - Energy cane and sorghum
  - Energy cane expandable in two years to 17k acres
  - Validation platform for growers



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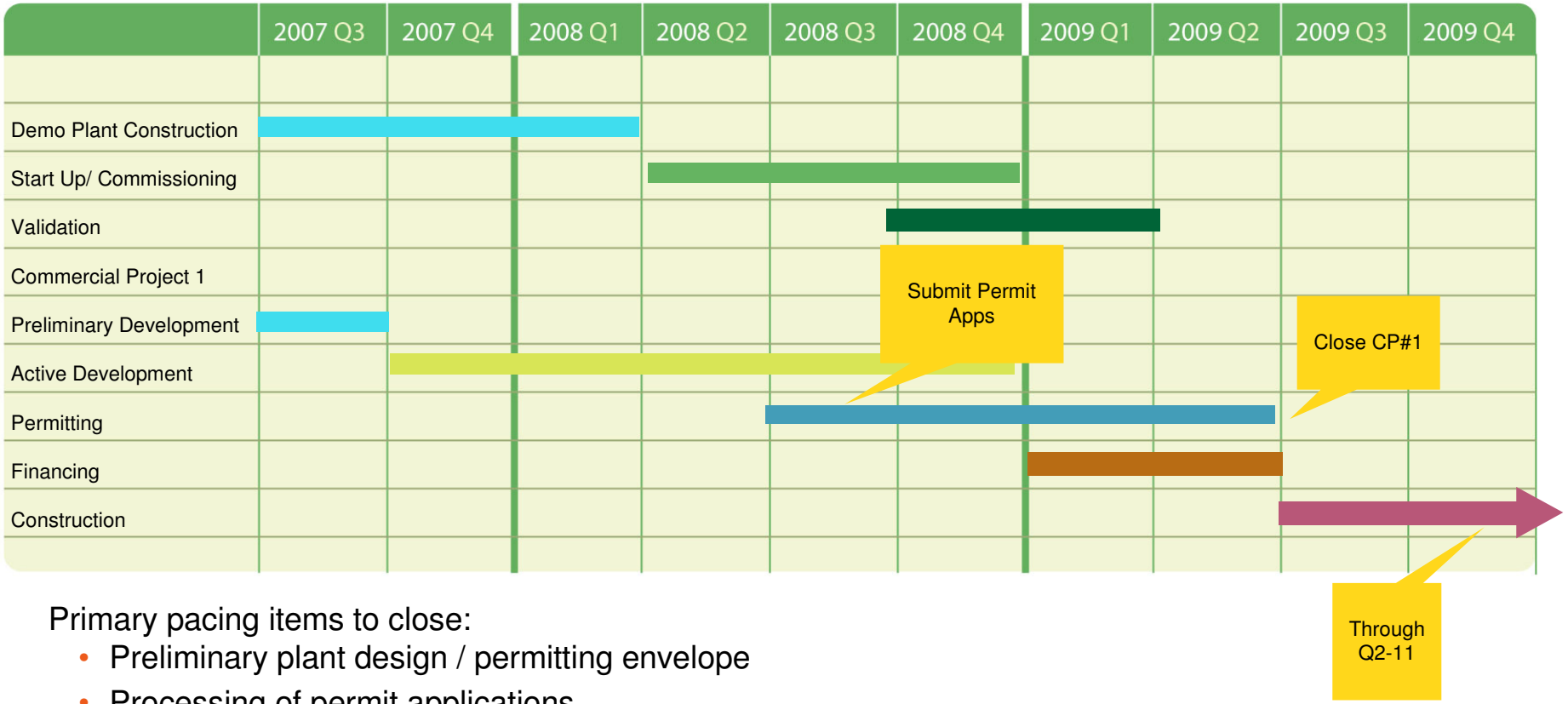
Commercial Project Development

Development timeline target: financial close by 7/1/09



Primary pacing items to close:

- Preliminary plant design / permitting envelope
- Processing of permit applications
- Key commercial contracts
- Validation of process economics
- Financing

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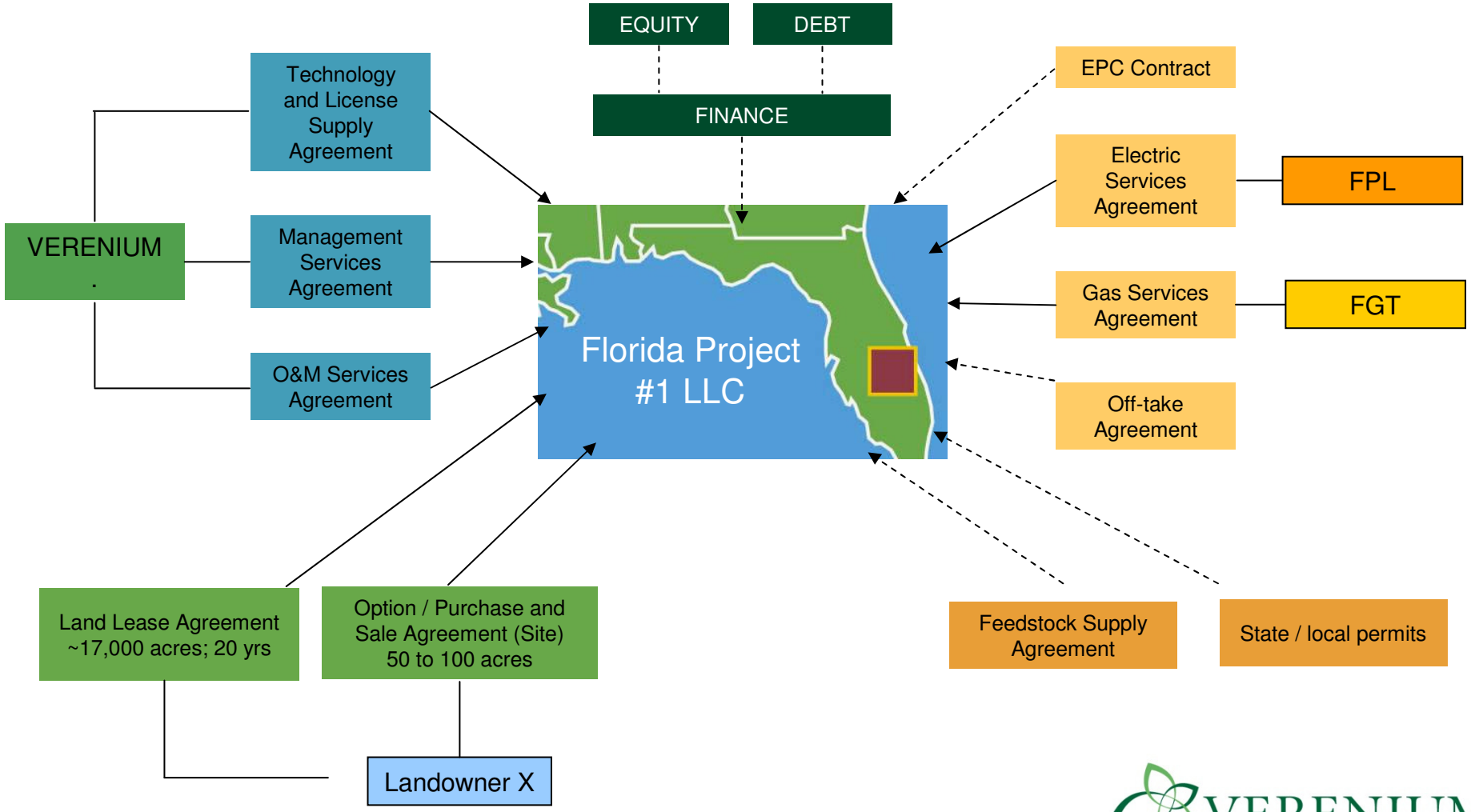
Potential Florida Project #1 Structure



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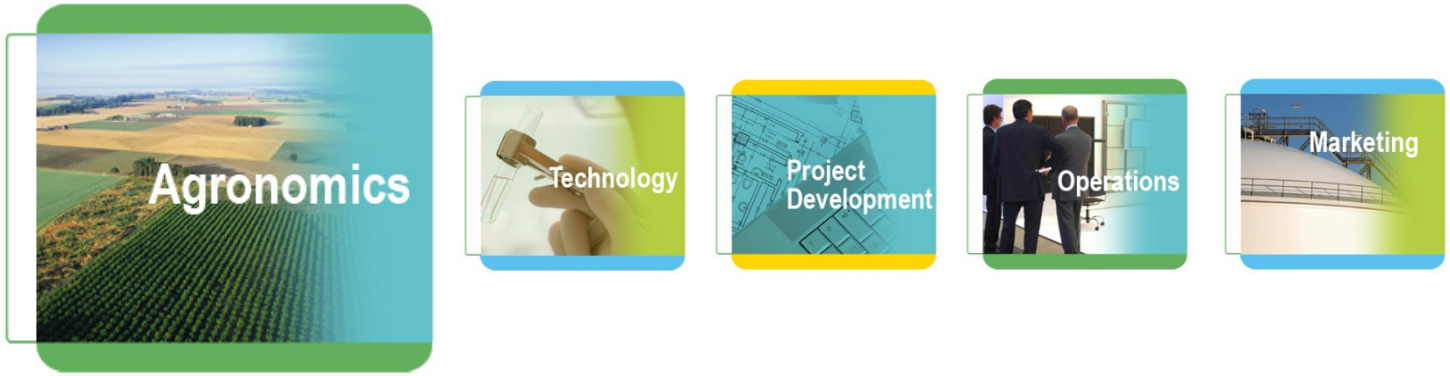
Strategy for Feedstock Agreements



Value chain: Land ownership | Planting | Cultivation | Harvest | Hauling

Key considerations: Risk allocation | Predictability of pricing

Methodology - Long term agreements:

- Example: contract with major land-owner / grower
  - — Option on 22-year land lease for 16,000 net farmable acres
  - — Predictable rent with certainty of use
- Feedstock supply agreement
  - — Pass through of energy / chemical costs
  - — Balance of cost is linked to broad inflation
  - — Floor mechanism for yield

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Strategy for Off-take Agreements

Value chain: Storage | Transport from site | Blending | Distribution & sale of product

Key considerations: Risk allocation | Predictability of pricing through floor mechanism

Methodology - Long term agreements

- Seeking to obtain high degree of linkage with underlying cost structure of business with appropriate margin

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Gulf Region Partnerships

Goals:

- Bring additional specialized skills across value chain
  - — Effectively de-risk projects
- Provide cash for development and ultimately construction of projects

Two forms:

- Site specific; asset based (e.g. co-located plant / Agriculture)
- Common partnership across multiple sites (Ag., E&C, and off take)

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Conclusion

- Advancing pipeline of well structured projects
- CP1 ready for construction starting in mid-year 2009
- Coherent, “project financeable” structures
- Partnerships at project level provide enhanced speed to market, coverage of full value chain

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Mid-Morning Q&A

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R&D Strategy

Bill Baum

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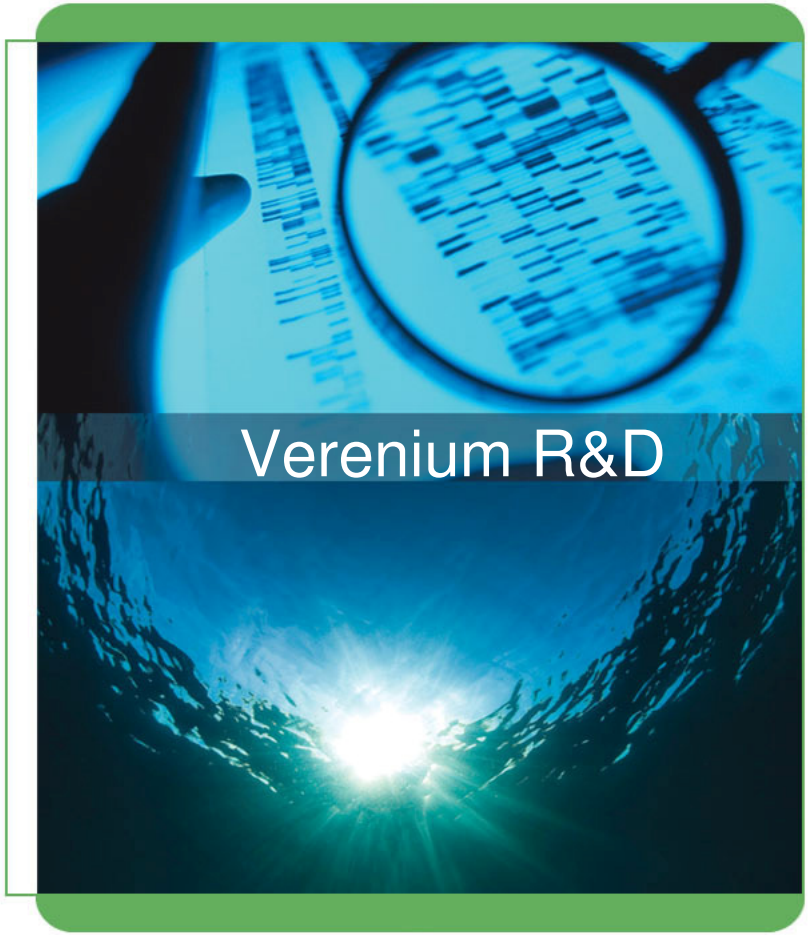
Overview



- Capabilities and team
- Biofuels
- Specialty Enzymes

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San Diego R&D Organization

- The R&D team
  - More than 140 scientists; 40 Ph.D.s
- Facilities & capabilities
  - 50,000 ft^2 of general laboratories
    - Molecular biology, biochemistry, enzymology, chemistry, bioinformatics and cell engineering
  - Purpose-built facilities
    - Engineering and automation, analytical sciences, DNA sequencing, bioprocess development and applications research
  - On-site fermentation pilot plant, staffed and operated 24/7
    - Scaleable from 200 mls to 500 liters
- Core technology platforms
  - Enzyme discovery and evolution
  - Fermentation

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Verenium's Unique Enzyme Technologies

- Biodiversity
  - Unique and legal access and patented approaches to capture microbial biodiversity
- DirectEvolution™ Technologies
  - Multiple methods to optimize enzyme performance at the gene/DNA level
- Ultra High-Throughput Screening
  - Ability to rapidly screen 100M to 1B samples per day
- Whole Cell Engineering and Fermentation
  - Revolutionary heterologous over-expression of unique enzymes in multiple strains by microbial fermentation
- Commercial Scale Manufacturing
  - Enzyme products made at 190K liter commercial scale

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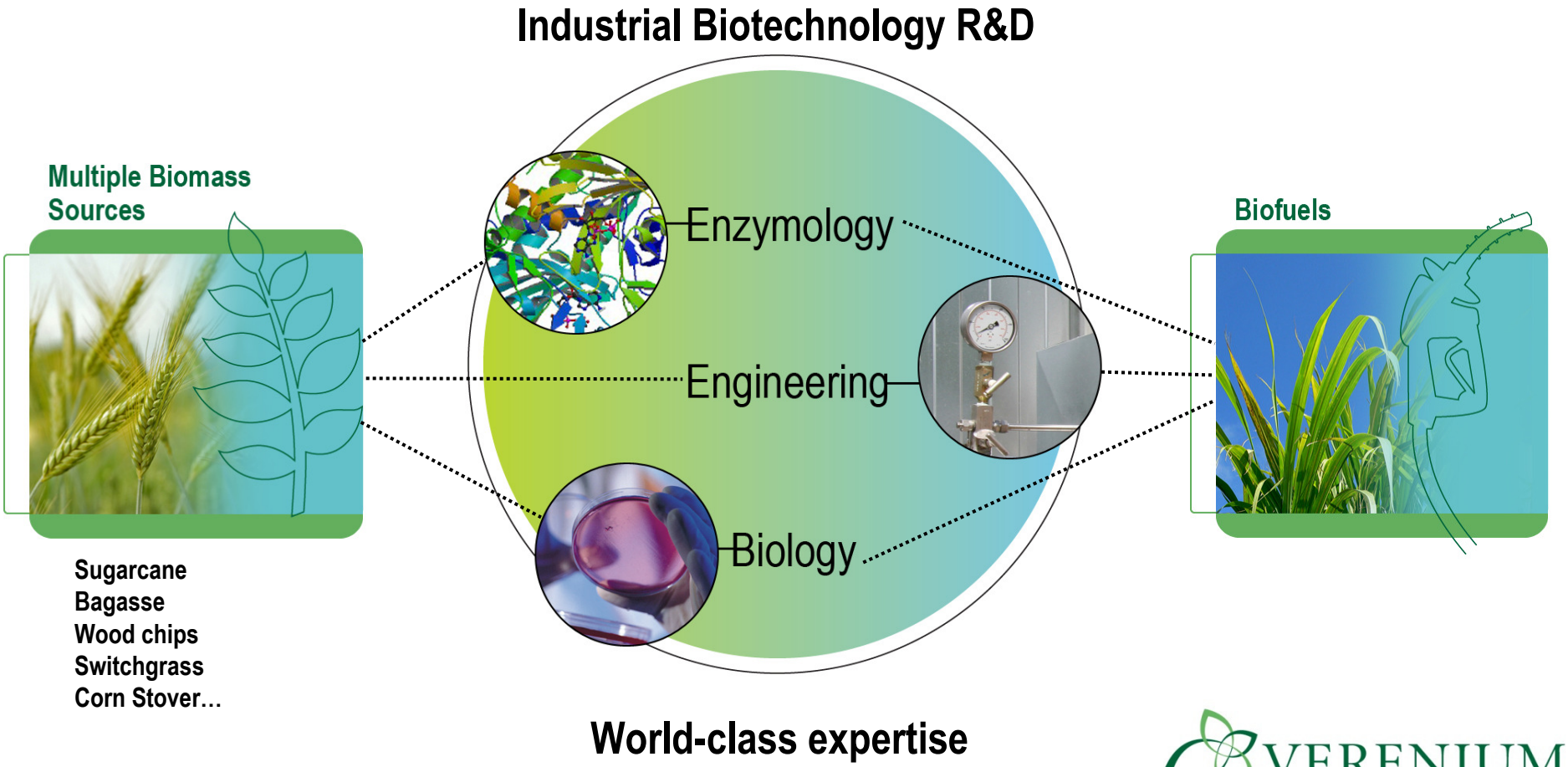
Applying the Full Potential of Industrial Biotechnology R&D

Proven industrial biotech expertise required to attain low-cost production goals



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Biofuels R&D at Verenium
Assets and scope

- Biofuels R&D in San Diego, CA and Jennings, Louisiana
  - Develop new enzymes, microbial strains and fermentation processes
  - Validate processes at bench scale

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Biofuels R&D at Verenium
Assets and scope

- **Pilot plant in Jennings, LA**
  - Test facility for pretreatment, liquid/solids separation, enzymes, ethanologens, fermentation processes, distillation and waste water treatment
  - Evaluate next generation cellulosic ethanol process improvements.

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Biofuels R&D at Verenium
Assets and scope

- **Demonstration plant in Jennings, LA**
  - Enable scale up and optimization of processes
  - Improve base case economics
  - Validate operating performance to move forward with commercial scale plant

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Leading R&D Will Deliver Competitive Advantage in Three Key Areas

- ***Feedstock flexible*** process for converting biomass to ethanol
  - Bagasse
  - Energy Cane
  - Wood and Forestry
  - Corn Stover
  - Energy Crops (Switchgrass, Miscanthus, Sorghum)

- ***Lowest cost ethanol*** production
  - Competitive with grain ethanol
  - Staged technology improvements to further reduce variable costs

- Leading edge ***technologies for next generation processes***
  - High performance enzymes
  - High productivity ethanologens
  - Robust fermentation processes

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Jennings R&D: Expanded Scale and Scope
Cellulosic Ethanol Center of Excellence

- Expanded scale of demonstration-scale plant providing platform to enhance performance on multiple feedstocks
  - Material handling & processing
  - Enzyme production & fermentations
  - Control systems & data collection
  - Water & wastewater systems
- Onsite R&D presence to drive efforts
  - Capabilities tailored for biomass to ethanol process
- World-class training facility for commercial operators
  - Verenium operators
  - Technology licensees

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San Diego R&D: Developing New Technology

Building for the future while supporting the present

- Broad-based capabilities support Jennings activities
  - Biochemistry and Enzymology
  - Bioprocess Development
  - Fermentation Technology
  - Analytical Sciences
  - Regulatory Sciences

- Focused research for next generation technology
  - Ethanologen Organism Engineering
  - New Enzyme Development
  - Development of Lower Cost Processes

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Verenium's R&D Objectives and Strategy

Next-generation ethanologens; lowest ethanol production costs

- Focused program for reducing fixed, variable costs of current process
  - Fermentation media and cycle times
  - TR1 enzyme yield
- Genetic approaches to increase productivity and improve robustness of C5 (*E.coli)* and C6 (*K.oxytoca)* ethanologens
  - Ethanol tolerance and yield
  - Resistance to fermentation inhibitors (e.g.: furfural)
- Alternative ethanologen organisms
  - Conventional yeasts for C6 fermentation
  - Engineered yeasts with pentose and hexose utilization
- Single fermentation or 'one pot' process
  - Simultaneous fermentation of pentose and hexose sugars
  - Streamlined improved process efficiency
  - Lower capital costs

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Verenium's R&D Strategy

Developing new high performance cellulase enzymes

- Current cellulase products are mixtures of 30 or 40 enzymes in fungal fermentation broths
  - Only *four* enzymes needed to break down cellulose
- Verenium strategy is to develop a minimal cocktail of high activity, performance enzymes tailored for efficient saccharification of cellulosic feedstocks
  - Broad-based discovery effort has resulted in library containing hundreds of unique cellulases (In Bio; JGI; DOE)
  - High-throughput miniaturized screening on cellulosic substrates has identified the best combinations of 4 enzymes
  - DirectEvolution® technologies are enhancing enzyme activity and reduced production cost
- Commercialization of new cellulase product in next 2-3 years
  - Captive use by Verenium and broad offering to the marketplace

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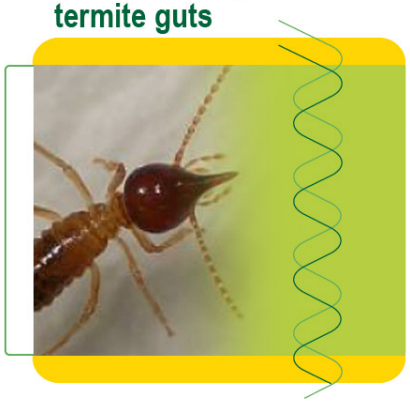
Verenium's Enzyme Development Partners

Enzymes for cellulosic ethanol production from various feedstocks

Celulosic enzymes from termite guts



- Thousand of species sampled
- Hundreds of new cellulases sequenced & patented
- JGI working under VRNM license (metagenomics)

Integrated corn biorefinery

- Candidate enzyme cocktail for corn stover meets DOE performance targets
- DuPont has rights to license enzyme cocktail

New Zeland Biofuels

- Focus on NZ wood biomass
- Gov't funding/support for energy independence
- Exclusive within NZ

Bagasse Conversion

- Candidate enzymes identified
- Focus on Brazil and Southeastern U.S.
- VRNM (fermentation); SYT (transgenic)

Strategic R&D Collaborations and Initiatives

Leveraging outside resources to extend Verenium biofuels R&D capabilities

- Develop high performance cellulase enzyme combination product for delivery by plant expression to the Verenium process
- Improve cellulase enzyme performance by DirectEvolution® for lower ethanol production cost

With DOE grant funding:

- Explore novel approaches for increasing ethanol production and toxin resistance of Verenium's ethanologens
  - Transcription engineering with MIT
  - *in silico* metabolic modeling with Genomatica
  - Metabolic engineering with the University of Florida

With DOE grant funding:

- Improve performance of low-cost cellulase / hemicellulase enzyme cocktails for saccharifying lignocellulosic feedstocks

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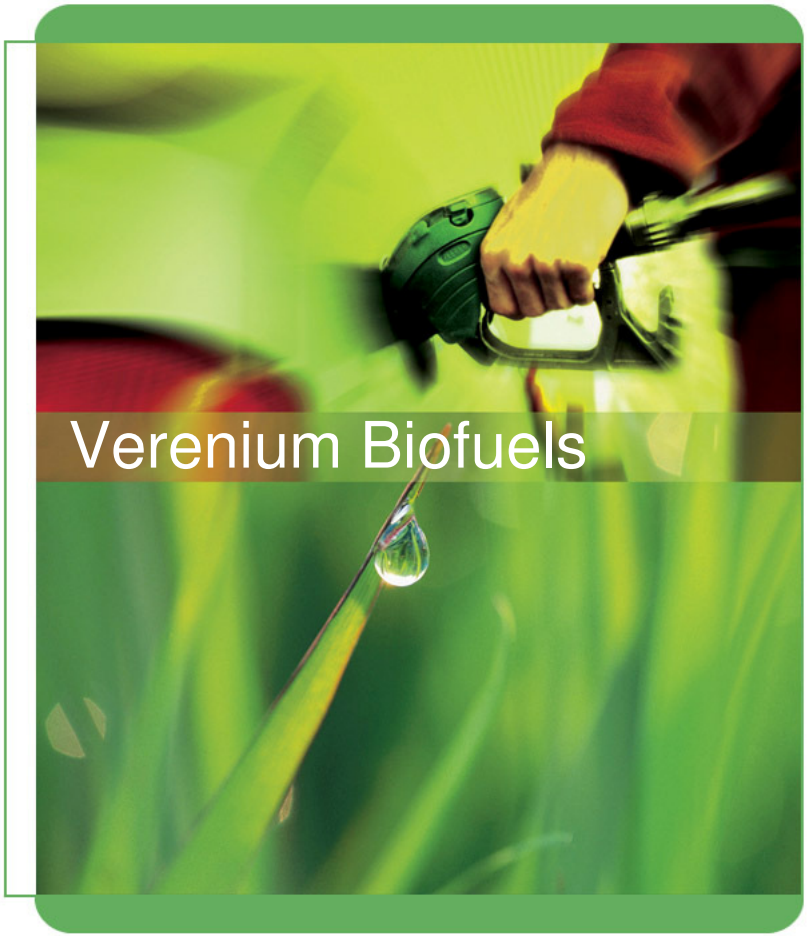
Verenium is Differentiated from Biofuels Competitors



- Proven industrial biotechnology expertise
- End-to-end cellulosic ethanol technology
  - Operational pilot-scale facility for R&D
- State-of-the-art Research & Development
  - Enzyme Discovery
  - DirectEvolution® technologies
  - Bioprocess Development & Manufacturing
  - Strain Development
- Unrivalled collection of cellulases, hemicellulases and accessory enzymes

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2008 Specialty Enzymes R&D Objectives and Strategy

Support Strategic Alliances

- Syngenta, BASF, Bunge, Cargill

Develop New Products

- High performance cellulase enzymes product for cost-effective conversion of biomass feedstocks to sugars

New Strategic R&D Collaborations

- Develop enzymatic processes for non-fuel products from cellulose sugars
- Access new enzyme expression technology
- Complement, extend existing portfolio

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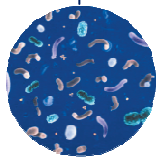
Specialty Enzymes Business Unit

Abridged history

Technologies:
- Mixed Libraries
- Evolution
- HTS
- Patents Filed

- Established Biodiversity Access

First patent issued



First patents issued for:
- Discovery from Mixed Populations
- Library Generation
- Directed Evolution
- Combining Discovery with Evolution

Industrial Genome Sciences / Recombinant Biocatalysis Opens

New Facility

Changed name to Diversa

IPO

Expand Facility

Refocus on Biofuels

VERENIUM formed through merger with Celunol

1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007

DANISCO

Aventis

NOVARTIS

syngenta

DOW

INNOVASE

Givaudan

syngenta

DUPONT

BASF

Bayer

DSM

Cargill

MERCK

XOMA

MEDAREX

GlaxoSmithKline

syngenta

BUNGE

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Fuelzyme™

Enable bulk shipment and storage

- Improve formulation to increase stability
- Minimize microbial contamination during bulk storage

Reduce cost of goods

- Increase fermentation yield
- Reduce production cycle time
- Reduce raw material costs

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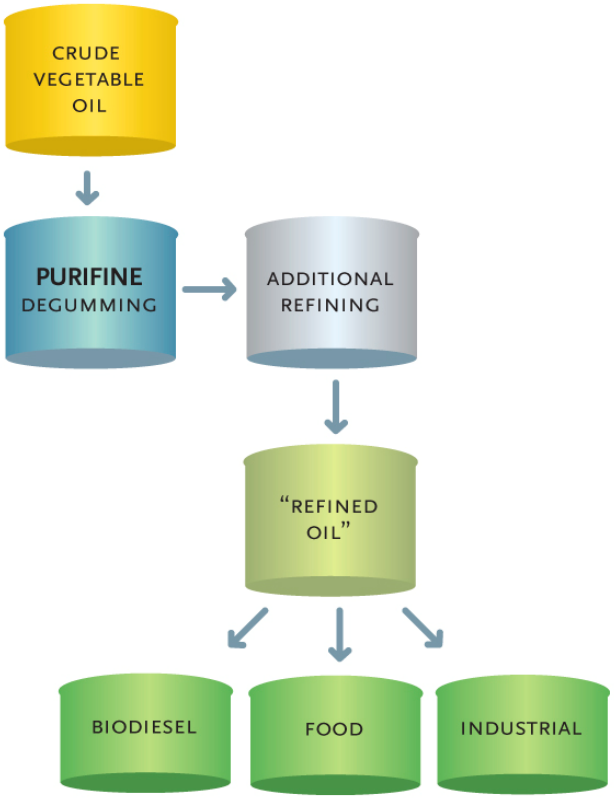
Purifine™

Refining Applications



Reduce enzyme manufacturing costs

- Increase fermentation yield
- Reduce production cycle time
- Reduce raw material costs

Increase product shelf life

- Improve formulation to increase stability, minimize microbial contamination, and extend shelf life to 6 months

Improve manufacturing processes

- Platform for optimizing management of commercial microorganisms (MCB / WCB), and in-process contamination

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The Specialty Enzyme Business

Janet Roemer

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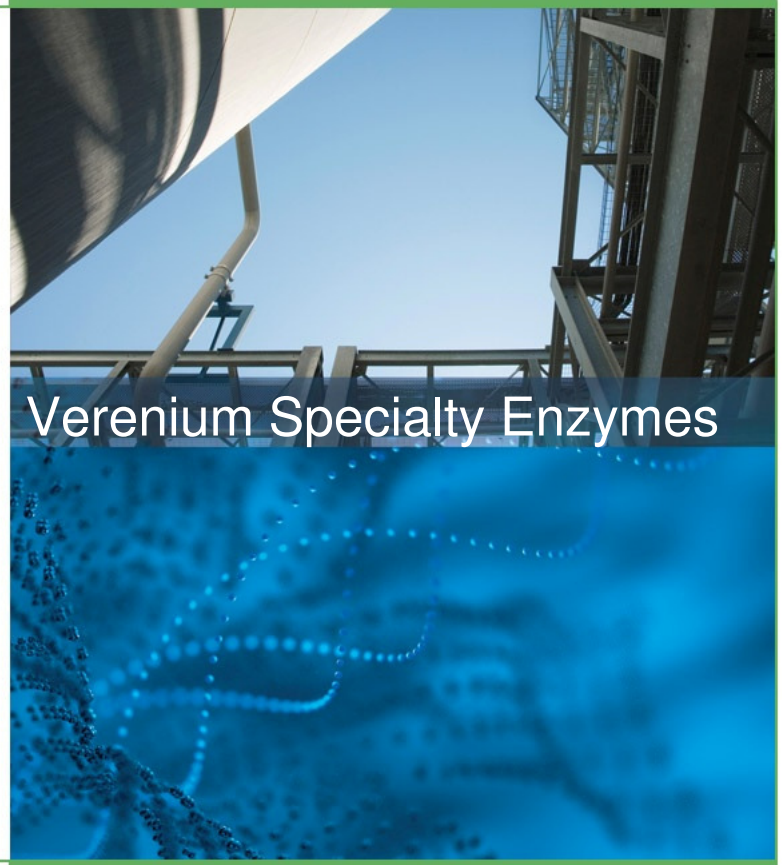
www.verenium.com

Overview



- Robust, growing portfolio of enzyme products
- Building capabilities to be preferred supplier in targeted markets
- Emerging opportunity in biofuels space
- Competitive advantage: experienced, world-class scientists leveraging proprietary discovery and evolution technology platforms to create products with distinctive competitive advantages tailored to targeted processes

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Specialty Enzymes Business Strategy

- Develop a portfolio of products serving diverse end-use markets that reward differentiated performance

- Be the preferred, end-to-end enzyme supplier in targeted markets by:
  - Investing in technologies required to develop differentiated enzymes
  - Developing manufacturing capabilities across multiple expression platforms
  - Developing supply chain capability
  - Adapting channel strategy to each market situation
  - Offering high level of technical service and applications know how

- Develop significant scale through
  - Growth of current, new, and adjacent products
  - Introduction of enzymes for cellulosic ethanol, both captive and merchant

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How Do We Make Money?

Products

- Sales
- Profit Share
- Licensing
- Royalties
- Tolls

Grants

Collaborations

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Product Revenue

- *Phyzyme* Phytase for the animal nutrition market
- *Fuelzyme* alpha Amylase for the corn ethanol industry
- *Purifine* Phospholipase for the edible oil refiners

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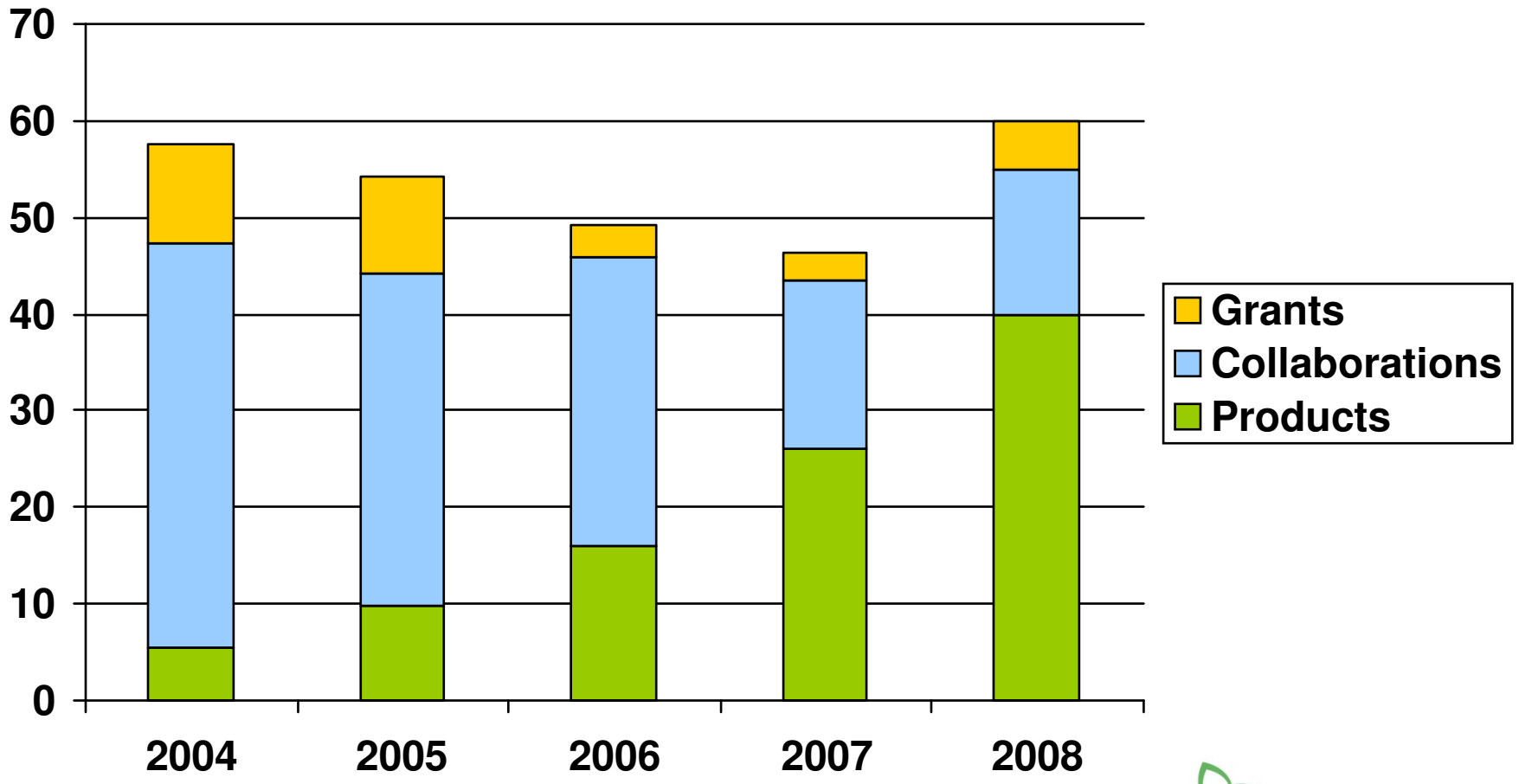
Strategic Shift to Focus on Products Reflects New Business Model



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Lead Product: Phyzyme Phytase

- Added to feed hydrolyses plant phytate to make more of the plant Phosphorous ‘available’ to pigs and chickens
- Enables release of phosphorus from cereals and protein meals, reducing need for dietary phosphorus supplements.
- Environmental benefit - limits on phosphorus release from intensive animal production a key driver.

Competitive Advantage

- High specific activity
- Improved thermotolerance for pelletizing
- Superior bioefficacy
- Danisco’s successful execution of market strategy

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Fuelzyme

A novel α-amylase enzyme for starch liquefaction over a broad range of pH and temperature

Competitive Advantage

- Unique action pattern
- Wider operating range than comparable starch enzymes

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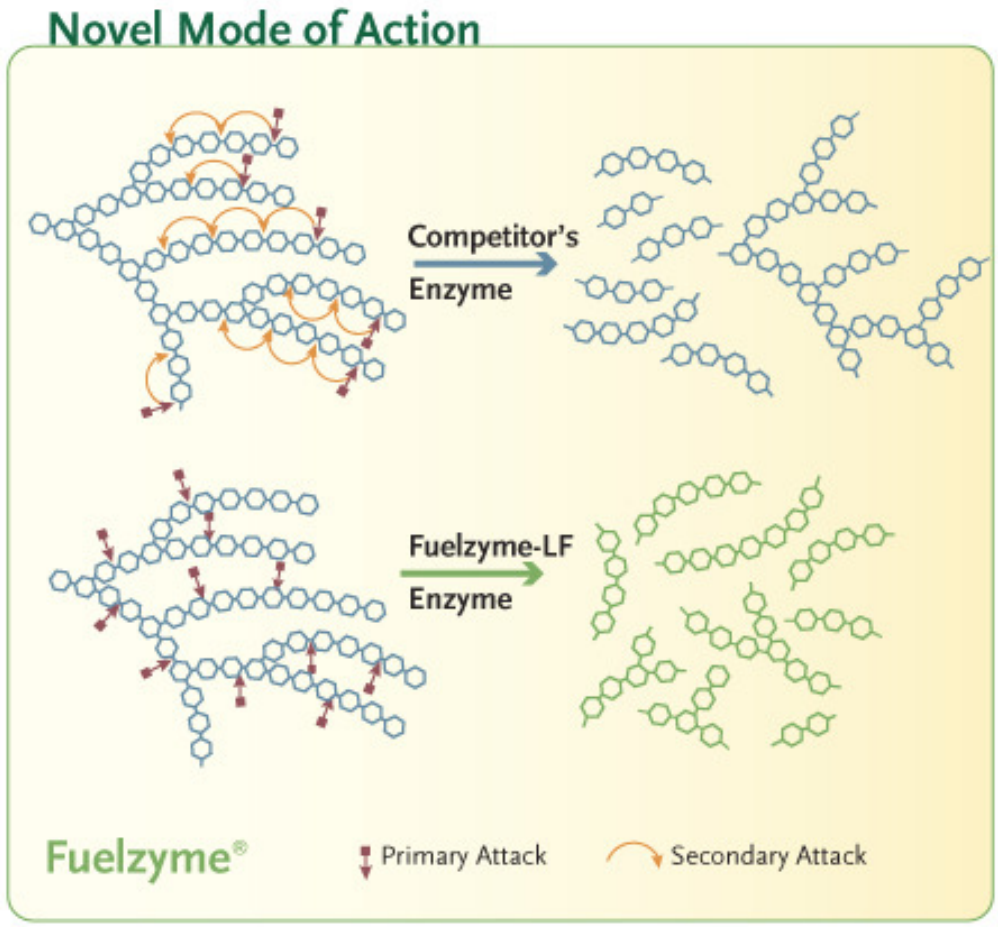
Fuelzyme Competitive Advantage: Unique Action Pattern



- Fewer high molecular weight fragments
- Uniform distribution of hydrolysis products

Atichokudomchai, N., Jane, J-L and Hazlewood, G. (2006). Reaction pattern of a novel thermostable α-amylase. Carbohydrate Polymers, 64: 582-588

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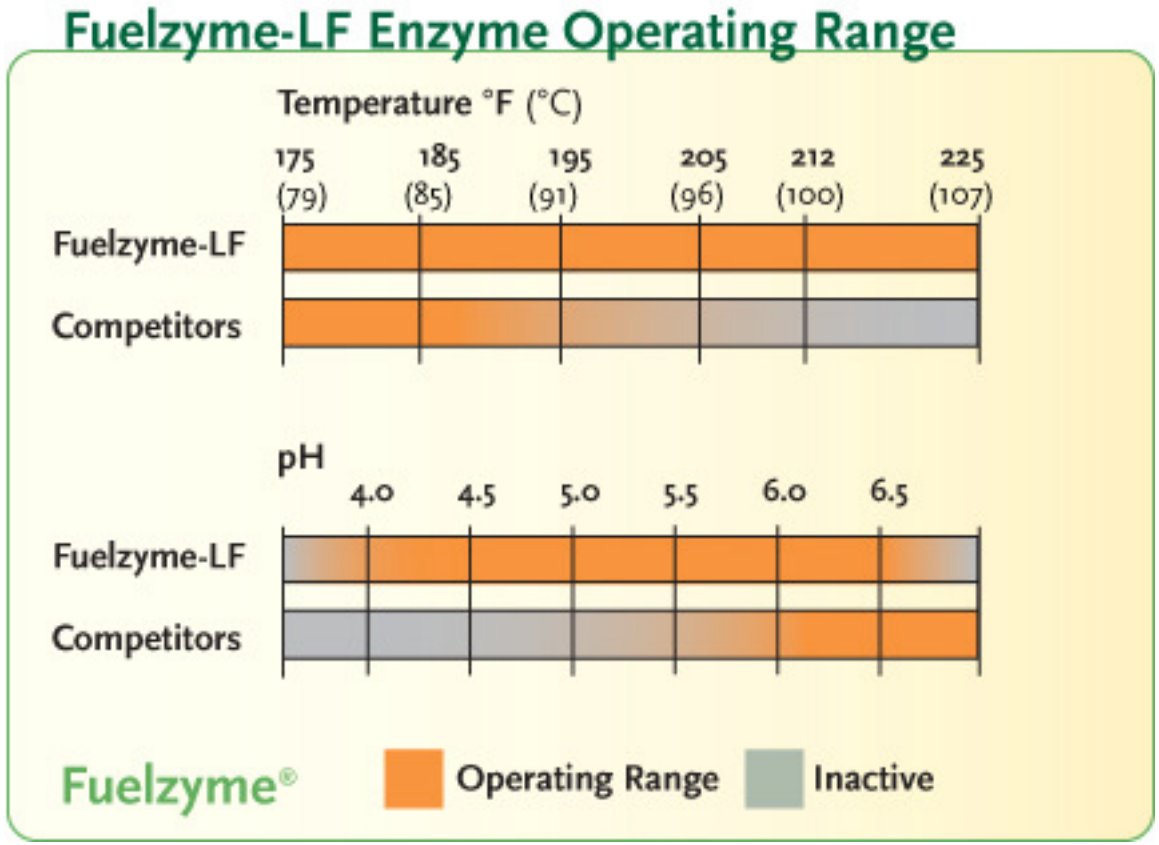
Fuelzyme Competitive Advantage:
Wider Operating Range Than Conventional Starch Enzymes



- Fuelzyme™ LF amylase provides ethanol producers superior viscosity reduction and greater operational flexibility for maximum ethanol yield

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Performance Advantages Observed in Multiple Plant Trials

- *Fuelzyme™ LF* enabled a reduction in amylase use
  - Effective dose 20% - 80% of competitor products
- Exceptional mash thinning at high dry solids
  - Starch throughput increased
- High ethanol yields in the fermentor
  - Yield increases demonstrated in several trials
  - *Fuelzyme™ - LF* set new record
- Effective liquefaction at low pH
  - Good viscosity control over range pH 4.8 – 5.2
  - Tolerance of 50% backset demonstrated
- Outstanding activity at higher temperatures
  - Efficient liquefaction at 225 ºF
  - Single dose before jetting effective

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Purifine

A new generation of phospholipase enzymes to improve yield during refining of high phosphorus oils including soybeans, canola, and sunflower

Competitive Advantage

- Competitive product requires significant retention time, is not robust, has narrow operating conditions and requires low pH thus more expensive materials of construction
- Partnership with Bunge
- Next generation of Purifine under development

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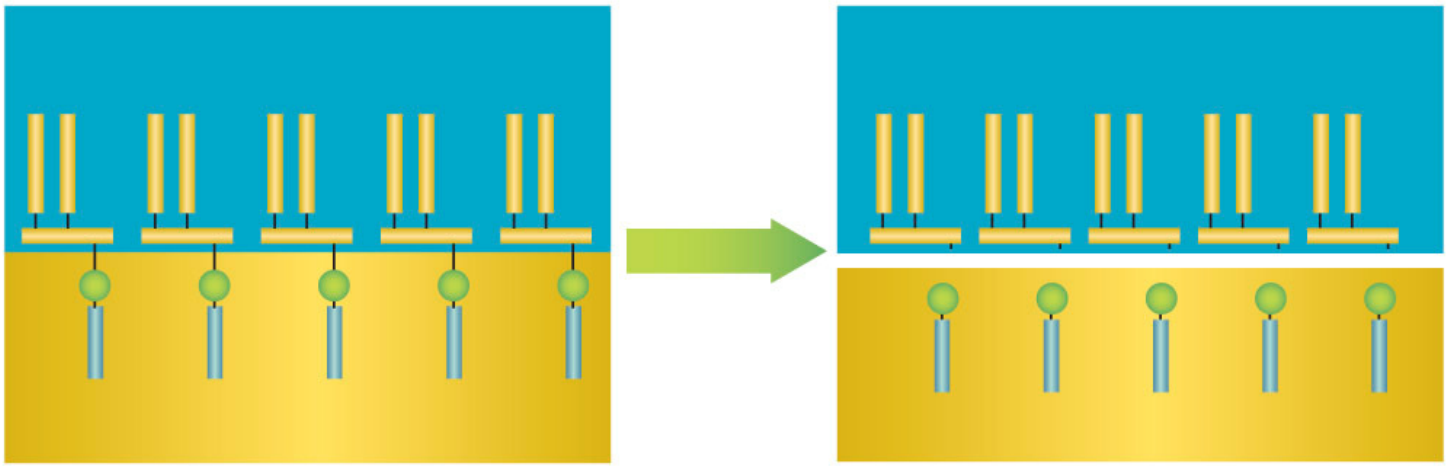
Purifine Enables More Efficient Oil Separation and Improves Yield



Use an enzyme to separate the oil component from the water-soluble component

- Dramatically reduce emulsifying property
- Cleaner separation of oil and water phases
- Less oil lost in “gum” fraction
- Increase in oil from 1,2-diacylglycerol

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End-to-End Capabilties to Serve Customers

- Manufacturing
  - Scale economies from 1.5m liter facility
  - Expansion opportunity
- Supply Chain
  - Mexico City - good port access east & west
  - Bulk shipping capability
  - New cold storage facility on site
- Commercial Organization
  - Product management
  - Customer service
  - Direct sales & through partners
- Technical service & applications development

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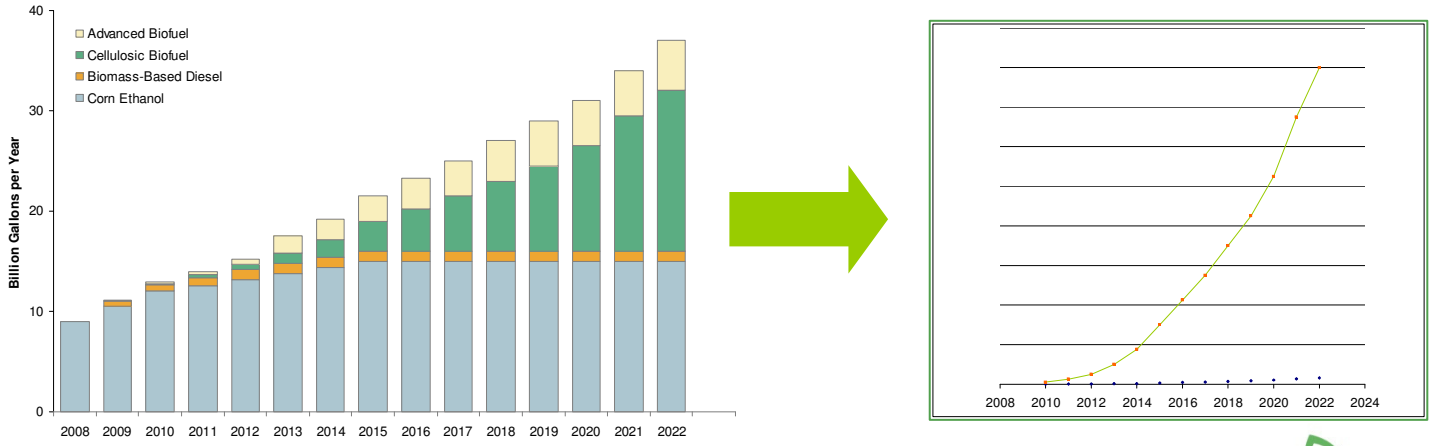
Looking Ahead:
Specialty Enzymes for Cellulosic Ethanol

- Huge potential market opportunity
- Verenium's choice of business model to be determined
- We will have competitive advantages
  - Early mover with wide range of product options
  - Co-development of enzyme and process
- Emerging technologies will have very different enzyme requirements
  - Plays to our strength in tailoring enzymes to processes



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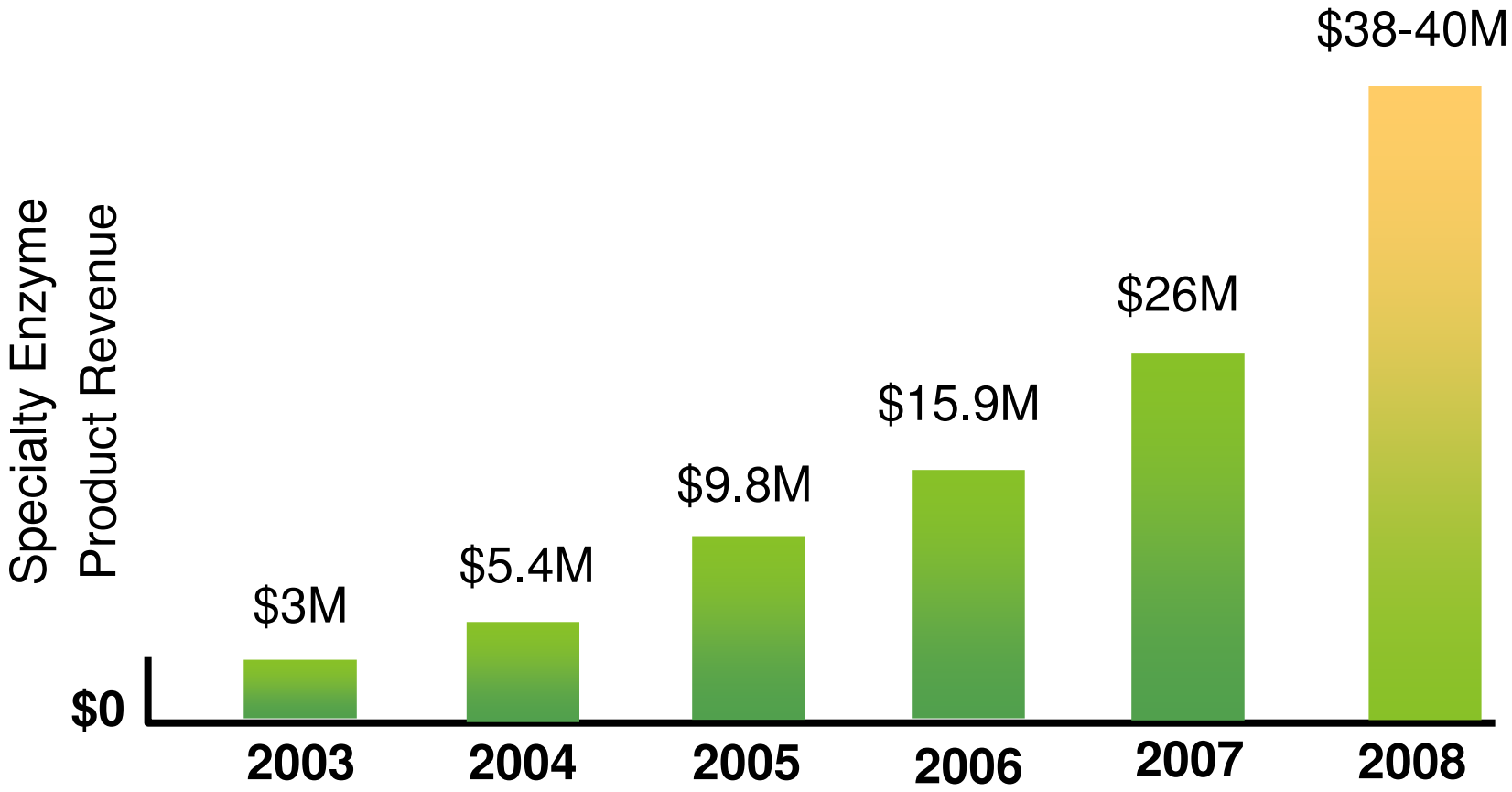
Enzyme Product Revenue Growth



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The Future

- Continued growth of current portfolio
- Exploit adjacent opportunities
- Develop offerings for cellulosic ethanol producers both captive and merchant

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Strategic and Project Finance

John A. McCarthy, Jr.

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Discussion Topics

- Biofuels Business Model Review
- Project-Level Economics
- Corporate-Level Economics

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Biofuels Business Model Review

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Biofuels Business Model Review

- Foundational strategy: “Build, Own & Operate” with strategically deployable, longer-term licensing component
  - Keystone: credible, near-term evidence of low-cost producer capabilities
- Owning/controlling the production asset => maximizes shareholder value
  - World-class disciplines: industrial biotech & large-scale asset development
  - Customer for best-in-class technology solutions developed over time
  - First-mover status => world-class corporate and project-level partners
  - Employment of prudent project finance structure => maximizes ROE
- Political & economic winds have never been more supportive
  - Acceleration of global partnerships
  - US legislative foundation now in place: Energy Bill and pending Farm Bill

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Project-Level Economics

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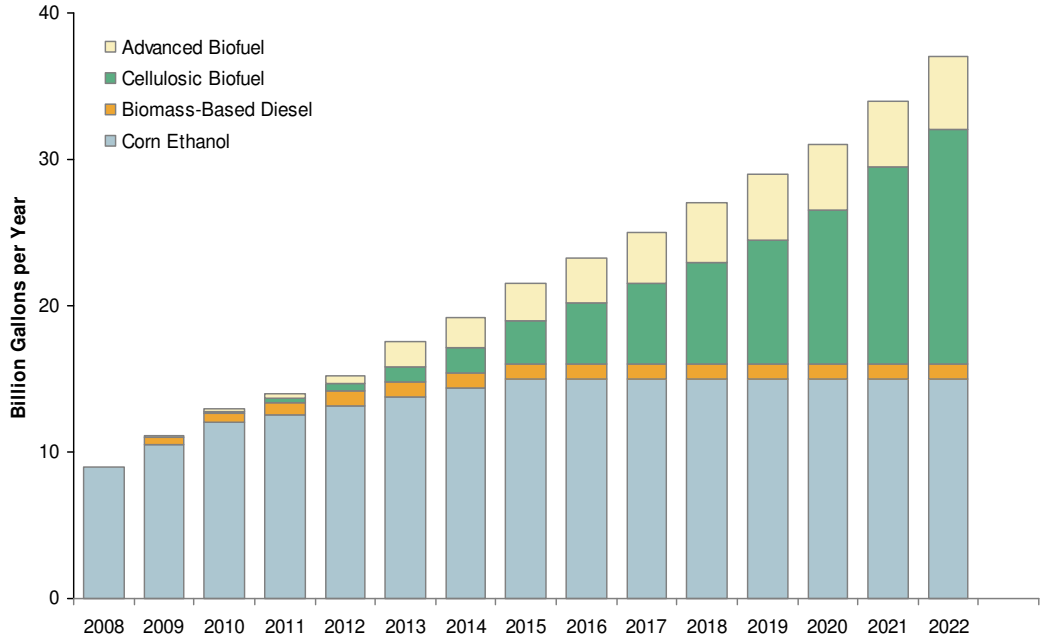
2007 EISA Mandates Cellulosic Ethanol Market

The market is widely expected to be "short" cellulosic ethanol for the foreseeable future.



2007 EIA Renewable Fuels Mandate

	Cellulosic Biofuels Billion Gallons / Year
2010	0.10
2011	0.25
2012	0.50
2013	1.00
2014	1.75
2015	3.00
2016	4.25
2017	5.50
2018	7.00
2019	8.50
2020	10.50
2021	13.50
2022	16.00

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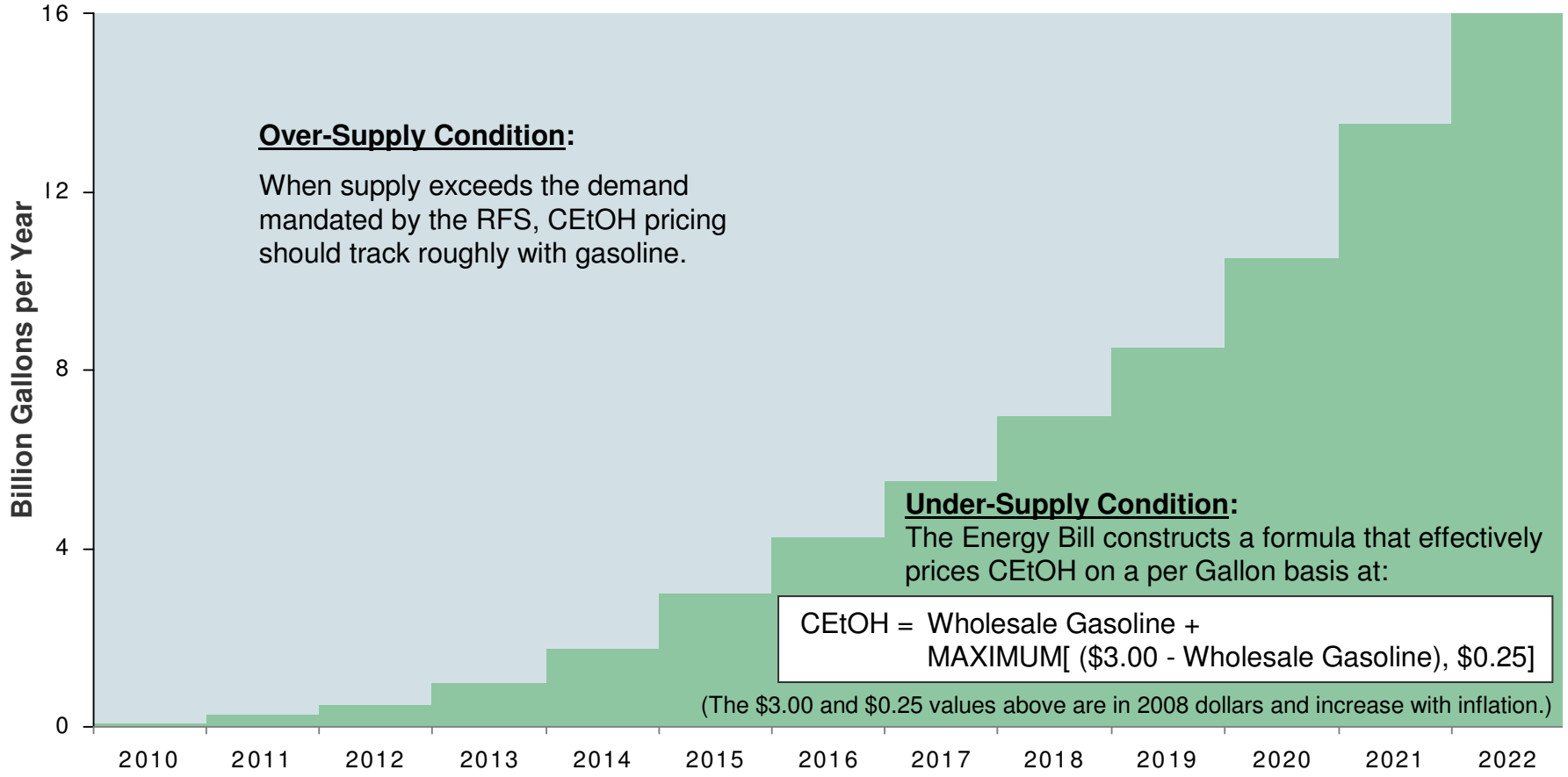
Cellulosic Ethanol Pricing and the 2007 Energy Bill

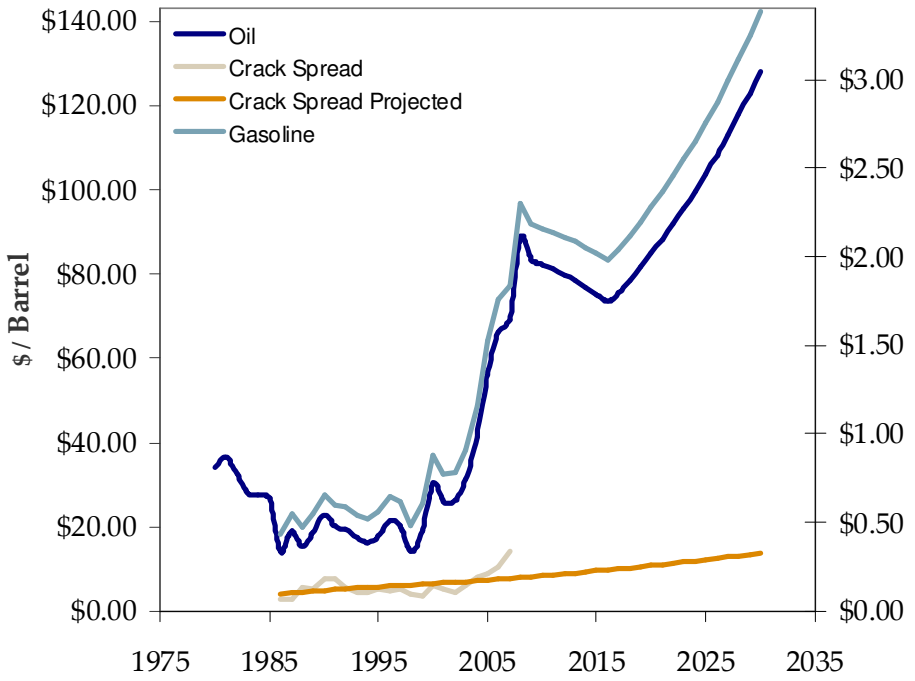
The 2007 Energy Bill mandates the consumption of minimum volumes of Cellulosic biofuels and has a prescription that drives cellulosic ethanol (CEtOH) pricing when supply falls short of the mandate.



Cellulosic Ethanol Pricing

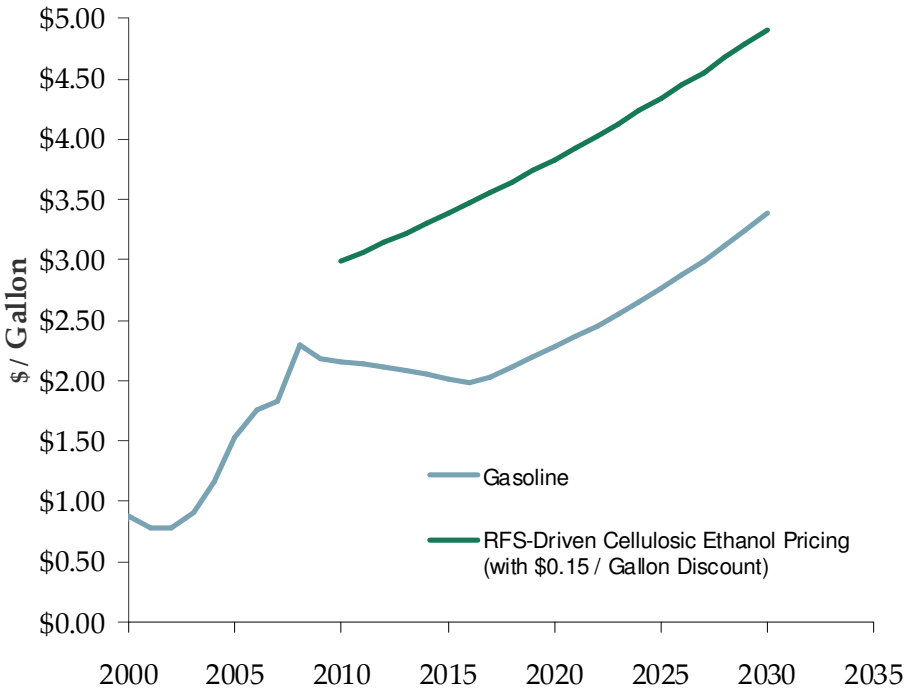
The 2007 Energy Independence and Security Act links the sales price of cellulosic ethanol and gasoline

Historical and Projected Oil and Gasoline Prices



Source: Oil: DOE EIA, April 2008 *Annual Energy Outlook*
Gasoline Historic: NY Harbor prices
Crack Spread: Computed
Gasoline Projections: Computed from Crack Spread and Oil projection

Projected Gasoline and Cellulosic Ethanol Prices



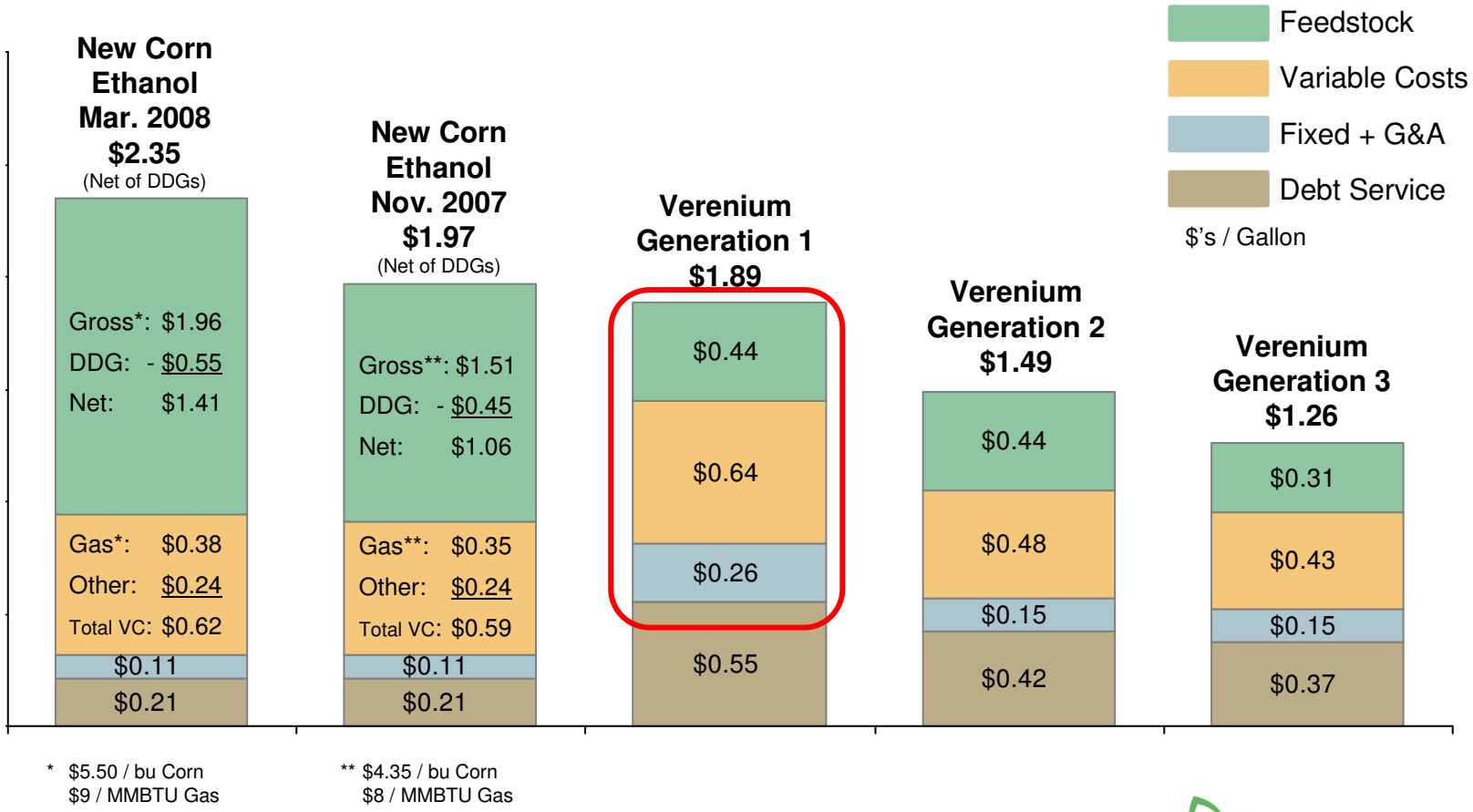
When the market is "short" cellulosic ethanol, credits will be sold at the greater of the difference of wholesale gasoline and $3, or $0.25. (In 2008 $'s and indexed to inflation.)

Cellulosic vs. Corn Ethanol Economics
Comparative Assumptions

Corn Plant	• U.S. corn plant • 105 MGY • $230 MM all-in cost • Feedstock costs $5.50 / Bushel **(18-month forward pricing)** • Feedstock costs are net of DDGs (95% basis) • Variable costs include drying of DDGs with $9 / MMBTU natural gas
Cellulosic GEN-1	• 30 MGY • $185 MM all-in cost **(includes $30MM in development, owner's hard & soft & fin. costs)** • $40 / BDT feedstock cost
Financing	• Debt / Equity : 60 / 40 • Debt at 11% interest for corn • Debt at 9% interest for cellulosic (decreased commodity exposure) • 10% principal repayment
Cellulosic Ethanol Specific Benefits NOT Included	• Accelerated depreciation • Producer credit • Grant support • Environmental / Carbon credits

Cellulosic & Corn Ethanol Economics

Cellulosic ethanol: minimized commodity risk & low-cost production



* $5.50 / bu Corn
$9 / MMBTU Gas

** $4.35 / bu Corn
$8 / MMBTU Gas

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Project Pro-Forma

Gen 1 Facility, $1.34 All-In Production Cost, RFS-Driven CEtOH Pricing

Summary Pro-Forma

Year Ending December 31,	2011	2012	2013	2014	2015	2016	2017	2018	2019
Ethanol Produced (G/000)(D-tOH)	31,500	31,500	31,500	31,500	31,500	31,500	31,500	31,500	31,500
Selling Price CEtOH	$2.99	$3.07	$3.15	$3.22	$3.31	$3.39	$3.47	$3.56	$3.65
Operating Revenues ($000)	94,320	96,678	99,095	101,572	104,111	106,714	109,382	112,117	114,920
Operating Expenses ($000)	**44,784**	**45,285**	**45,743**	**46,232**	**46,729**	**47,308**	**47,938**	**48,649**	**49,383**
Feedstock	13,333	13,333	13,333	13,333	13,333	13,333	13,333	13,333	13,333
Steam	-	-	-	-	-	-	-	-	-
Variable O&M	22,316	22,596	22,828	23,085	23,345	23,667	24,047	24,502	24,973
Fixed O&M	5,010	5,135	5,264	5,395	5,530	5,680	5,822	5,968	6,117
General & Administrative	980	1,005	1,030	1,056	1,082	1,111	1,139	1,168	1,197
Royalties	3,145	3,215	3,288	3,362	3,438	3,516	3,596	3,679	3,763
EBITDA	**49,536**	**51,392**	**53,352**	**55,341**	**57,383**	**59,406**	**61,444**	**63,467**	**65,537**
Annual Debt Service ($000)	**20,998**	**19,981**	**18,965**	**17,948**	**16,931**	**15,999**	**14,983**	**13,966**	**12,949**
Interest	9,701	8,684	7,668	6,651	5,634	4,702	3,686	2,669	1,652
Principal	11,297	11,297	11,297	11,297	11,297	11,297	11,297	11,297	11,297
Funds Available After Debt Service	28,538	31,411	34,387	37,393	40,451	43,407	46,462	49,502	52,588
Prepayment									
Reserve Funds Balances	**5,000**	**5,000**	**5,000**	**5,000**	**5,000**	**5,000**	**5,000**	**5,000**	**2,500**
DSRF	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	-
Working Capital	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500
Distributions/(Cash Calls)	28,538	31,411	34,387	37,393	40,451	43,407	46,462	49,502	52,588

Project Average DSCR	3.55
Project IRR	37.3%
NPV of Shareholder Distributions at 10.00%	339,291
NPV of Shareholder Distributions at 12.00%	266,122
NPV of Shareholder Distributions at 15.00%	187,056

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Verenium Cellulosic Ethanol Projects

Project-Level Financial Returns

Project pre-tax IRR's and NPV's, not considering additional benefits such as Accelerated Depreciation, Production Tax Credit (PTC), or Carbon-Offset credits.

		Generation 1 Production Costs			Generation 2 Production Costs			Generation 3 Production Costs		
		$1.21 (-10%)	$1.34 (Base)	$1.61 (+20%)	$0.96 (-10%)	$1.07 (Base)	$1.28 (+20%)	$0.80 (-10%)	$0.89 (Base)	$0.97 (+20%)
RFS-Driven CEtOH Pricing	IRR	40%	37%	33%	64%	62%	57%	80%	78%	74%
	NPV (10%)	366,995	339,291	283,883	1,050,296	1,004,124	911,781	1,246,940	1,209,526	1,134,698
	NPV (12%)	289,703	266,122	218,960	855,617	816,247	737,509	1,025,631	993,760	930,017
	NPV (15%)	206,024	187,056	149,122	643,091	611,350	547,868	783,114	757,451	706,124
Gasoline-CEtOH Parity	IRR	15%	12%	8%	30%	27%	22%	39%	37%	33%
	NPV (10%)	57,170	29,466	(24,755)	387,031	340,860	248,517	555,816	518,402	443,574
	NPV (12%)	28,066	4,485	(41,398)	291,108	251,739	173,000	433,812	401,940	338,197
	NPV (15%)	(1,772)	(20,740)	(57,303)	189,710	157,970	94,488	303,625	277,962	226,635

Notes:

\+ Price curves detailed for 20 year life of project on page 6

* Production costs are detailed on page 3

** Generation 1 Commercial Operations begin in 2011

++ Generation 2 Commercial Operations begin in 2013

%% Generation 3 Commercial Operations begin in 2015

Finance Assumptions: 60% Debt at 9% Interest and 10 Year Fully amortized note, $0 residual value at end of 20 year project life.

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Verenium Cellulosic Ethanol Projects

Project-Level Financial Returns

Cellulosic-Ethanol benefits are likely to include:

Revenue

Production Tax Credit:	CEtOH PTC of $1.01 minus the blending credit ***(only through 2013)***	$0.50	$ / Gallon
Carbon-Offset Credits:	20 lbs of Credit per CEtOH Gallon sold ($10/Ton Offset Price)	$0.10	$ / Gallon
		$0.60	$ / Gallon

Capital Expenditure Offset

Accelerated Depreciation	NPV (at 20%) of accelerated depreciation of CEtOH production facilities (57% in first year). This is assumed to be monetized and the proceeds used to reduce overall project spend.	$35 M Gen1 $55 M Gen2 $45 M Gen3

		Generation 1 Production Costs			Generation 2 Production Costs			Generation 3 Production Costs		
		$1.21 (-10%)	$1.34 (Base)	$1.61 (+20%)	$0.96 (-10%)	$1.07 (Base)	$1.28 (+20%)	$0.80 (-10%)	$0.89 (Base)	$0.97 (+20%)
RFS-Driven CEtOH Pricing	IRR	60%	57%	52%	87%	85%	79%	82%	80%	77%
	NPV (10%)	456,914	429,210	373,802	1,175,361	1,129,190	1,036,847	1,295,635	1,258,221	1,183,393
	NPV (12%)	372,778	349,197	302,035	970,155	930,785	852,047	1,067,327	1,035,456	971,713
	NPV (15%)	280,726	261,759	223,824	745,128	713,387	649,905	816,918	791,254	739,927
Gasoline-CEtOH Parity	IRR	29%	25%	18%	47%	43%	36%	43%	40%	36%
	NPV (10%)	146,970	119,266	63,873	511,858	465,687	373,343	604,271	566,857	492,029
	NPV (12%)	111,039	87,458	40,312	405,441	366,072	287,333	475,303	443,432	379,689
	NPV (15%)	72,847	53,880	15,961	291,581	259,841	196,359	337,263	311,599	260,272

Corporate-Level Economics

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Corporate-Level Economics

- Biofuels…dependencies:
  - Demo plant validation of economic model
  - Corporate and project-level partners => optimal # of projects
  - Project finance marketplace
- Specialty Enzymes Business…dependencies:
  - Revenue trajectory: Phyzyme and new products
  - Gross margin optimization given current manufacturing strategy
  - Product pipeline development
- Corporate-level P&L Profitability…dependencies:
  - Trajectory of business units
  - ***Discretionary spend controls trajectory***

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Q&A

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