



## INITIATION | COMMENT

JUNE 1, 2010

**Codexis, Inc. (NASDAQ: CDXS)****Initiation of Coverage: Chemistry to Go Green****Outperform  
Speculative Risk**

Price:	10.34	Price Target:	14.00
Shares O/S (MM):	34.1	Implied All-In Return:	35%
Dividend:	0.00	Market Cap (MM):	353
Float (MM):	13.7	Enterprise Val. (\$MM):	394.1
		Avg. Daily Volume (MM):	0.27

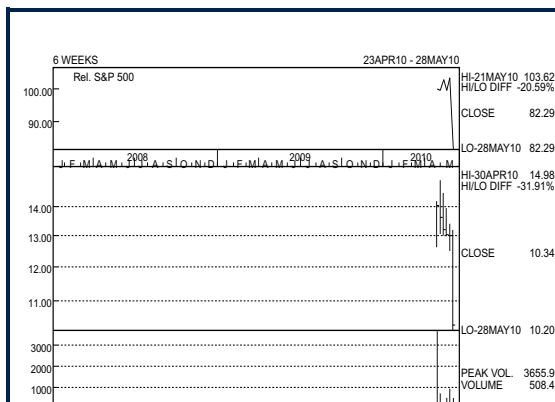
**Initiating Coverage****Investment Opinion**

**Net:** Codexis develops customized enzymes through its proprietary gene shuffling technology for the pharmaceuticals industry and has several long-term opportunities in clean tech industries including biofuels, carbon management, and water treatment. We believe the company's proven technology and growing share in pharma paired with optionality in biofuels, backed by its partnership with Shell, offer a low capex platform with leverage to multiple clean tech end markets. While near-term financials will be quite variable, dominated by customer base adoption and volatile royalty payments, we believe commercialization of biofuels by Shell by 2013 and similar adoption cycles in carbon management and water treatment will drive high-margin royalty streams. Given the established pharma business and upside from the biofuel commercialization opportunity, we initiate coverage with an Outperform, Speculative Risk rating and a price target of \$14.

- **Proven technology developed via low capex platform.** Company's proprietary gene shuffling technology to optimize enzymes is used in the manufacturing of intermediates and APIs for pharma companies. Optimized enzymes facilitate chemical transformations faster, cheaper, and with higher yields. Iterative gene shuffling technology creates a portfolio of "super enzymes" valuable to pharma, biofuel, and other emerging clean tech industries. Capex and R&D have historically been funded through strategic relationships with third parties.
- **Established and growing pharma business.** Pharma industry is in early stages of adopting optimized biocatalysts to drive down costs and improve the manufacturing process. Generics employ optimized enzymes to lower costs while Innovators are using screening processes to survey the Codexis library for optimized enzymes that can produce desired drug traits. Revenue base is diversified and visible with 89% CAGR from 2006 to 2009. We expect revenue growth in Pharma of 35% in 2010 on continued product penetration.
- **Shell Key Partnership for Biofuel Optionality; Commercialization Timing Uncertain.** We believe multi-year R&D collaboration with Shell could represent \$450M in FTE revenue and \$130M in royalties, milestone revenue, and product revenue from 2010 to 2015. Our revenue estimates are based on assumption of Shell's commercialization of biofuel production by 2013. Given Shell's ability to reduce or cancel Codexis R&D funding (as early as Nov. 2010), we believe biofuel segment valuation multiples will remain speculative until visibility around commercialization timing improves.

Priced as of prior trading day's market close, EST (unless otherwise noted).

For Required Conflicts Disclosures, see Page 17.

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FY Dec	2009A	2010E	2011E	2012E
Revenue (MM)	82.9	96.0	121.4	168.7
EBITDA (MM)	(12.3)	(2.8)	0.1	19.4
EPS (Op) - FD	(0.58)	(0.33)	(0.27)	0.14
P/E	NM	NM	NM	73.9x
Revenue (MM)	Q1	Q2	Q3	Q4
2009	19.4A	19.2A	20.1A	24.2A
2010	25.7A	21.8E	22.5E	26.0E
2011	28.3E	28.5E	29.9E	34.7E
EBITDA (MM)				
2009	(4.3)A	(1.0)A	(3.8)A	(3.2)A
2010	0.7A	(2.1)E	(2.0)E	0.5E
2011	0.2E	(1.1)E	(1.1)E	2.1E
EPS (Op) - FD				
2009	(0.22)A	(0.10)A	(0.22)A	(0.19)A
2010	(0.05)A	(0.14)E	(0.12)E	(0.05)E
2011	(0.06)E	(0.10)E	(0.10)E	(0.01)E

All values in USD unless otherwise noted.

## Business Opportunities

### Established and Growing Pharma Business

The Codexis biocatalyst platform has been commercialized for pharmaceutical biocatalysts and is utilized by large scale pharma manufacturers to drive down the production costs of various drugs. Opportunities exist for product uptake throughout the product lifecycle from preclinical development to clinical development and commercialization of products. The customer base consists of several large global players including Pfizer, Merck and Arch.

We believe that gross margin improvement is achievable over time as business mix shifts from generics toward higher margin branded innovator products. Historically, innovators have focused on cost reduction in the late stage of clinical development but are now focusing on reducing costs earlier in order to improve long-term margins. As a result, innovators are now investing in new technologies to improve manufacturing productivity and are outsourcing manufacturing of intermediates and APIs, both of which are beneficial trends to Codexis.

### Relationship with Shell Promotes Commercialization of Biofuels

Shell continues to fund R&D expenses for Codexis' development of biocatalysts that can enable conversion of cellulosic biomass to biofuels on a commercial scale. Shell's joint venture with Cosan in Brazil offers a unique distribution angle not available to most other competitors. Codexis stands to receive continued R&D funding plus royalties and product revenue in the future on biofuels sold by Shell enabled by Codexis technologies.

Shell has twice expanded its R&D funding relationship with Codexis since inception in 2006 and now reimburses research expenses for 128 full-time employees. This level of commitment both validates the Codexis technology and provides a low-capex platform for the continued development of biocatalysts for use in the bio-industrials industry. Additional revenue may be recognized during the life of the Shell agreement based on achievement of certain technical and commercial milestones, all of which have been met to date. We believe that full-time employee equivalents (FTE) revenue of \$450 million and additional royalties, milestone revenues and product revenues of more than \$130 million are achievable from 2010 to 2015 from the Shell relationship.

### Opportunity to Leverage Technology Platform into High-Growth Markets

The markets for use of biocatalysts in CO<sub>2</sub> reduction and water treatment remain in the early stages of development and represent potential future growth opportunities. Codexis retains the rights to use intellectual property developed by its collaboration with Shell and believes opportunities exist to leverage this IP across other bio-industrials industries. The company is pursuing partnerships similar to its Shell relationship to provide R&D funding for biocatalyst development, offering the potential for additional low-capex growth opportunities.

### Government Support of Biofuel Production Provides Industry Support

The Environmental Protection Act of 2007 introduced renewable fuel standards that call for the annual production of renewable fuels from cellulosic biofuel in the United States to increase to 16 billion gallons by 2022, a dramatic increase from targeted 2010 production levels of 100 million gallons. The Act requires biofuel production from "conventional" renewables such as corn to be capped beginning in 2016, resulting in an increasing contribution from cellulosic biofuel to total biofuel production in the out years.

## Business Risks

### Dependence on Shell for Biofuel Commercialization

The amount of R&D funding received from Shell is based on the number of full-time employee equivalents. Shell has the ability to reduce the number of employees eligible for expense reimbursement, which could impair the ability of Codexis to bring its biofuels biocatalysts up to commercial scale. Shell has the right to begin reducing funding for FTEs as early as November 2010.

The timing and pace of manufacturing and distribution of biofuels will be controlled by Shell, potentially affecting the level of royalty fees and product revenues that the company may earned. Manufacturing and distribution levels will be a function of several factors including subsidy levels, oil price, feedstock prices and overall fuel demand. Full commercialization of biofuels is dependent on success of other Shell relationships with Iogen and Cosan.

Shell has entered into biofuel production arrangements with other companies such as Virent that may present risk to product commercialization. We believe that Codexis technology holds more potential for commercialization than Shell's other relationships because of the superior performance in key production variables that are important to commercialized biofuel production including product yield, throughput, and heat and atmospheric pressure requirements. We believe that Shell's 20% equity interest in Codexis along with a history of expanding the R&D relationship serves to align Shell's interests with those of Codexis.

Our optimistic outlook for the bioindustrials segment is dependent upon Codexis gaining traction with Shell in biofuels and with similar large partners in carbon management and other segments in the future. Commercialization of biofuels will be impacted by Shell's decisions around R&D funding and distribution of biofuels, and any adverse developments along the manufacturing and distribution chain would likely negatively impact Codexis. Although we are not anticipating such difficulties with the Shell relationship, we do acknowledge the associated third party risks. A mitigating factor to these risks is the company's established and growing pharma business which we believe provides valuation support in the range of \$5 - \$7 per share (as shown in the Valuation section of this report). The remainder of our price target is based upon optionality in the bioindustrials segment.

### Concentration Risk in Key Partnerships

In addition to the Shell relationship, other partnerships are in place that lower capital requirements but also introduce partnership and execution risk. Commercial scale manufacturing for substantially all current biocatalysts is performed by two third-party manufacturers: CPC Biotech and Lactosan. Arch is an exclusive supplier of intermediates and active pharmaceutical ingredients for Codexis under an agreement that runs until February 2020.

Maxygen has licensed core gene-shuffling technology to Codexis, which the company uses in its technology platform. This exclusive license extends for the life of the patents. Codexis relies on Maxygen for patent enforcement and faces the risk that Maxygen may decline enforcement or deny the ability to enforce the licensed patents. We believe that the historical relationship between the two companies and coupled with Maxygen's 21% ownership interest in the equity provide incentive for Maxygen to act in the best interests of Codexis.

### Shift to Innovator Products in Pharma Adds Adoption Risk

The growing contribution of innovator products to the pharma pipeline introduces additional risks with adoption of optimized biocatalysts. Biocatalysts must be incorporated early and must receive FDA approval in order to be included in the manufacturing process. For products in post-launch stage, changes to the manufacturing process would likely require additional FDA review. Innovator production ramp may be delayed dependent on FDA compliance.

## Company Overview

### Recent Results

Codexis reported Q110 results on Wednesday May 27. Revenues of \$25.7M grew 28% year-over-year driven by higher product revenue in pharma and the receipt of a \$2.7M research grant during the quarter. Revenue growth excluding grant revenue was 18.5% Y/Y. Company expects to generate total revenues of \$94M - \$98M during 2010 driven by growth in pharma product revenue with 2010 bioindustrials revenue expected to be in line with 2009 levels. Adjusted EBITDA (adding back stock-based compensation) was a positive \$2.8M (\$738M absent the adjustment) largely due to receipt of the research grant during the quarter. Company acknowledged that the level of adjusted EBITDA was unusually high in the quarter, but stated that it does expect to generate positive adjusted EBITDA for full year 2010. Our valuation is based upon GAAP EBITDA and does not back out stock-based compensation, therefore our representations of EBITDA in our model and in our valuations will differ from Codexis' description of adjusted EBITDA.

### History

Codexis commenced operations in March 2002 after being incorporated in January 2002 as a wholly owned subsidiary of Maxygen Inc. In 2003, the company began collaborating with large-pharma companies to develop biocatalysts used to improve the manufacturing process of intermediates for pharmaceuticals. A multi-year research and development collaboration with Shell began in 2006 to develop biocatalysts for use in the conversion of biomass to biofuels. Today, Codexis develops biocatalysts for several, large, global companies in the pharma and energy industries including mega-cap companies Shell, Merck and Pfizer.

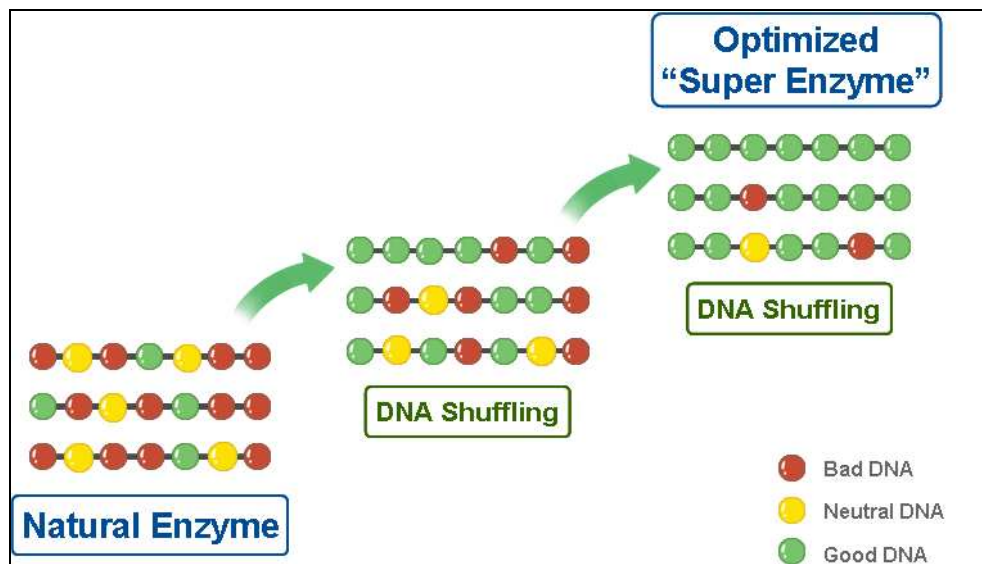
### Core Technology: Optimization of Nature's Enzymes

Enzymes or biocatalysts occur naturally and have historically been used in manufacturing processes to accelerate various chemical reactions such as those involved in the creation of ethanol from sugar or in the creation of intermediates for pharmaceuticals. Environmental factors necessary for chemical reactions to occur, such as room temperature or atmospheric pressure, have limited the cost-effective use of enzymes in the manufacturing process on a commercial scale. Codexis' core technology involves optimizing enzymes to increase the efficiency of chemical reactions to a level suitable for commercial use.

The company's proprietary technology platform employs a gene-shuffling process to create optimized enzymes or biocatalysts designed to perform at requirements necessary for commercial-scale manufacturing. Codexis technology improves on the traditional chemical-manufacturing process by allowing enzymes to operate at room temperature and pressure resulting in higher-quality products manufactured at lower costs and higher yields.

#### Exhibit 1: Codexis' Optimized Biocatalysts

Proprietary Gene-Shuffling Technology Creates Biocatalysts Suitable for Use in Commercial-Scale Production



Source: Company reports

In addition to the gene-shuffling process, the technology platform includes proprietary bio-informatics software. This software allows for the identification of gene mutations and the inclusion of beneficial mutations or the avoidance of detrimental mutations.

Codexis has developed a library of optimized biocatalysts that can potentially be leveraged across multiple industries. The pharmaceutical industry was the first targeted market and has shown good product adoption with companies, such as Pfizer, Merck and Dr. Reddy's, employing Codexis' optimized biocatalysts. In biofuels, Shell has entered into a collaborative, multi-year, R&D agreement with Codexis in an effort to apply optimized biocatalysts to the production of biofuels. Additional opportunities exist to leverage the technology platform into markets involving CO<sub>2</sub> reduction and water treatment.

## Customer Base

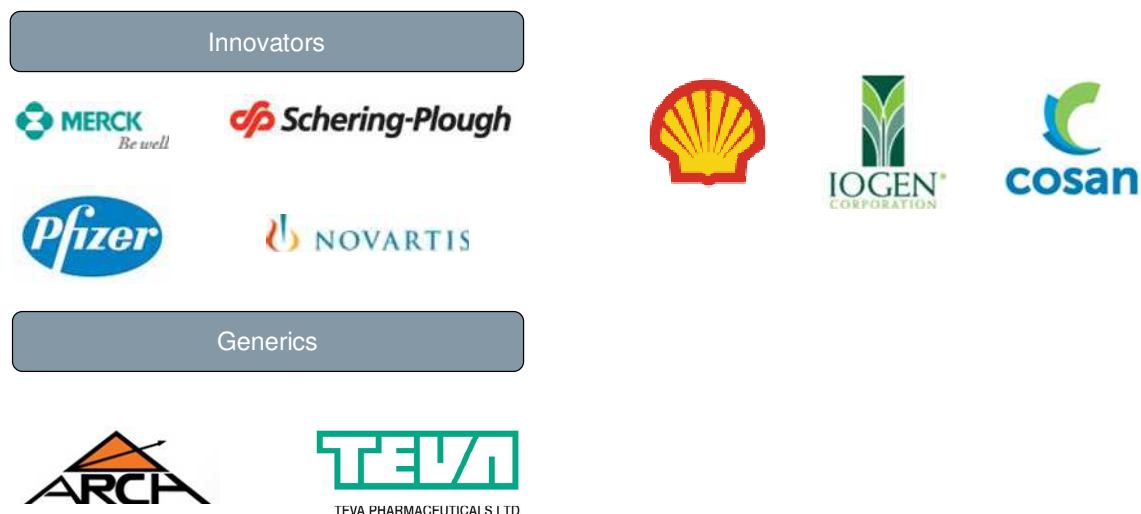
Key customers include some of the larger pharmaceutical companies in the world in both generic and innovator products. Shell is the largest contributor to revenues and the primary relationship for the bio-industrials business segment. The top-five customers represented 90% of the company's total revenue in 2009 with Shell representing 76% of the total.

### Exhibit 2: Current Customer Base

Key customers include many large-pharma companies and Shell in biofuels

#### Pharmaceuticals

#### Biofuels



Source: Company reports

## Business Segments

### Pharma: Established and Growing Business

#### Biocatalyst Applications add Value throughout the Product Lifecycle

Codexis biocatalysts can be used throughout the pharma-product lifecycle to improve the manufacturing process. Early cycle products have employed biocatalysts to accelerate products' speed to market, while post-launch products have used the biocatalysts to reduce manufacturing costs, improve product yields and enhance product quality. The company's biocatalysts are currently used by a variety of large customers including Merck, Pfizer, Dr Reddy's Laboratories, Ranbaxy Laboratories, and have been used in both innovator and generic-product applications.

Pfizer's production of Lipitor represents a notable example of how Codexis biocatalysts have improved the manufacturing process. Atorvastatin (ATS-5) is the active pharmaceutical ingredient (API) in Lipitor and has historically been produced via a chemistry-based manufacturing process that is expensive, complex and capital intensive. Codexis introduced its optimized biocatalysts into the manufacturing process, which resulted in improved efficiency, higher yields and the elimination of a costly purification step from the manufacturing process. The biocatalysts were also used to achieve similar successes in the manufacturing process for ATS-8, the API used by manufacturers of generic Atorvastatin.

#### Proven Success in Generics and Growing Market Adoption

The cost-driven market for generic pharmaceuticals has been an early adopter of optimized enzymes to lower manufacturing costs. Codexis has had early successes in this market providing improvements to generic intermediates and APIs for companies including Arch and Teva. Intermediates have also been supplied for generic equivalents of products such as Singulair and Cymbalta in markets where these products are not subject to patent protection. Opportunities exist in both existing generic products and in products that are nearing patent expiration.

Through the company's supply relationship with Arch, Codexis' manufacturing process is scalable to take advantage of growth opportunities with limited additional capital investment. Based in India, Arch is a manufacturer and supplier of intermediates and APIs, and offers access to various end markets across the world. Under the agreement, Arch has exclusive manufacturing rights for intermediates until 2020.

### Innovator Opportunity at Big Pharma

Big pharma is in the early stages of adopting Codexis' product services, but rollouts on high-profile drugs such as Lipitor and Januvia are indications of early successes. Innovators are typically introduced to Codexis products and services via the Codex Biocatalyst Panels, plates embedded with proprietary biocatalysts that allow customers to screen the Codexis library for desired activities or drug traits. This introductory product often leads to additional revenue opportunities via the sale of biocatalyst products as well as screening and optimization services.

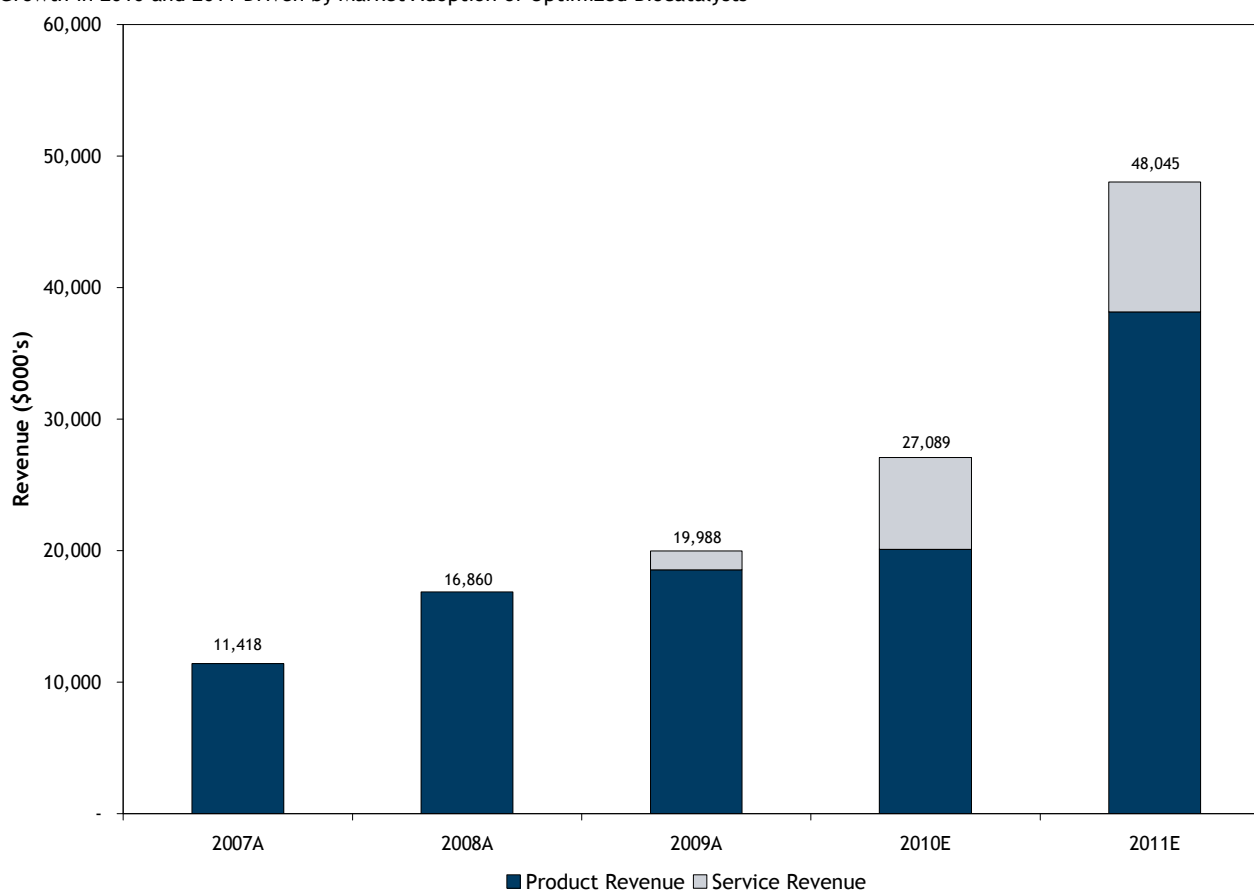
Codexis' current efforts to target drugs in early clinical stages offer the potential to expand reagent sales and services as the FDA approves clinical drugs and enter commercialization. We believe this target market results in lower clinical risk, shorter time to market and larger product volume, which should allow for margin expansion as the customer mix shifts increasingly toward innovators. The current customer base among big-pharma companies includes Pfizer, Merck, Roche, GlaxoSmithKline and Novartis.

### Commercialized Biocatalysts Driving Product and Service Revenue Growth

We expect continued adoption of optimized biocatalysts in the manufacturing process to drive growth in both innovator and generic products and service revenues. Market adoption by generics should grow as optimized biocatalysts drive lower-production costs enabling generic producers to continue to compete on a low-cost basis. Successful product rollouts with big-pharma leaders Pfizer and Merck on high-profile drugs such as Lipitor and Januvia are expected to drive increased adoption in innovator products. We model significant top-line growth in product and service revenues as market adoption increases and product backlog grows.

#### Exhibit 3: Pharma Revenue

Growth in 2010 and 2011 Driven by Market Adoption of Optimized Biocatalysts



Source: Company reports, RBC Capital Markets estimates



## Bio-industrials: Biofuels Now, Opportunities in Carbon and Water Later

### Optimized Biocatalysts Promote Commercial-Scale Production of Biofuels

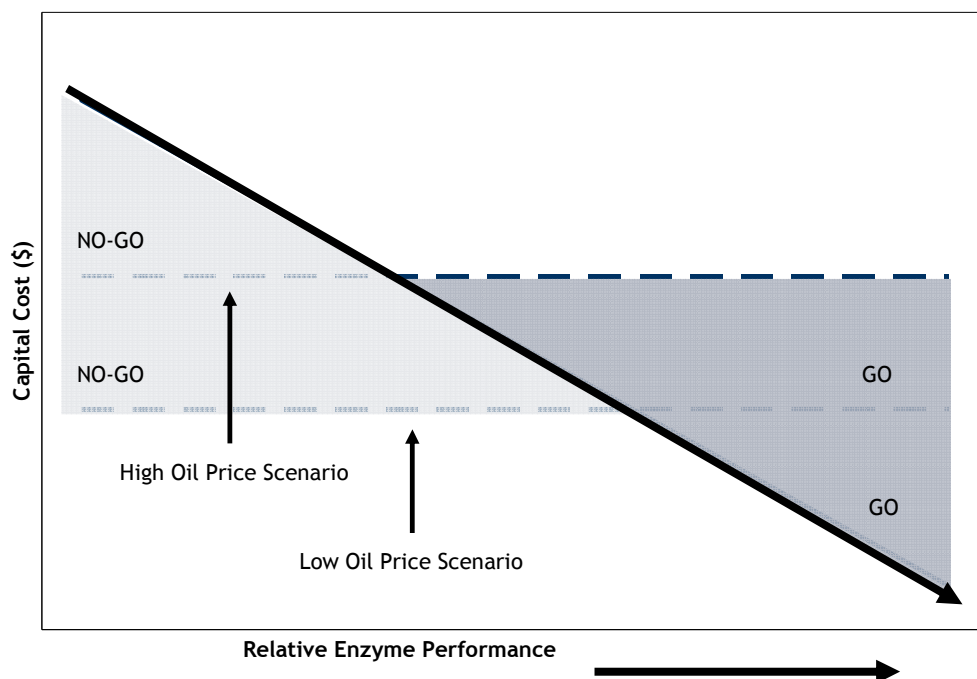
Codexis is working with Shell to develop optimized biocatalysts designed to improve the process of converting cellulosic biomass and sugar into ethanol and biodiesel. Naturally occurring biocatalysts have historically been used in the manufacturing process but lack the characteristics necessary to make biofuels a viable alternative to traditional fuels on a commercial scale. Through its proprietary technology platform, Codexis develops methods to optimize biocatalysts enabling enzymes to perform chemical reactions on a commercial scale.

Codexis solutions are feedstock agnostic and can be employed across various stages of the biofuel development process. Optimized biocatalysts can be used to improve the rate and speed at which cellulosic material, such as switch grass and wood chips, is converted into fermentable sugars. The process of converting traditional feedstock including corn and sugar cane can be improved to produce more sugar per unit volume, and the company has already tested biocatalysts that produce twice as much sugar from cellulose as the leading commercially available products.

Conventional chemistry-based manufacturing has been unable to achieve commercial viability in biofuels primarily due to insufficient stability and productivity of naturally occurring biocatalysts. Codexis' optimized biocatalysts improve on the conventional process by allowing the manufacturing process to occur at or near room temperature and pressure, which allows for the use of less-complex and lower-cost manufacturing equipment. The results are increased production rates and yields with a lower-manufacturing cost, pushing down the manufacturing cost curve and increasing the pace at which biofuels can become commercially viable.

### Exhibit 4: Ethanol Plant Production Model

Codexis Biocatalysts Improve Enzyme Efficiency and Drive Down Capital Costs Enabling Biofuel Production



Source: Company reports, RBC Capital Markets

As biocatalyst optimization improves, relative enzyme-performance capital costs associated with ethanol production decline. This improved efficiency drives down the cost curve for biofuel production and brings biofuels closer to becoming commercially viable. The improved efficiency also makes biofuel production economically viable at a lower oil price, potentially increasing the adoption of biofuels as an alternative source of energy.

### Potential to Leverage Technology Platform into Carbon Management and Water Treatment

Codexis retains the right to use intellectual property developed by the Shell collaborative R&D agreement in fields outside of biofuels and related products. The company intends to leverage this intellectual property across other areas in the bio-industrials segment including carbon management and water treatment. These opportunities are expected to occur later than the opportunity in biofuels due to the absence of a large partner such as Shell to provide R&D funding to accelerate development of technology, but it could potentially represent meaningful future revenue opportunities.

The EIA projects annual global CO<sub>2</sub> emissions to increase to 33 billion metric tonnes by 2015 and 40 billion metric tonnes by 2030, driven by a growing demand for power coupled with a growing population base. Governments across the world are attempting to curb CO<sub>2</sub> emissions via regulation of output and subsidies, or other economic incentives designed to reduce emissions. Codexis is currently developing biocatalysts to reduce CO<sub>2</sub> emissions by optimizing biocatalysts used to remove CO<sub>2</sub> from flue gases emitted from coal-fired plants. Today's leading technology for this "carbon scrubbing" is an amine solvent used to separate CO<sub>2</sub> from other exhaust gases. Based on initial models, Codexis biocatalysts have shown the potential to increase the efficiency of these amine solvents allowing for a greater likelihood of commercial viability.

The market for biocatalysts in water treatment remains in the early developmental stages. A growing population base coupled with a finite supply of fresh water is expected to drive a need for improvements in waste water treatment, removal of pollutants from existing water sources, and other areas of water treatment. As this market develops, Codexis believes that opportunities will arise for the use of biocatalyst-embedded water filters and other technologies that will be employed to protect the global supply of fresh water.

## Shell Relationship a Key to Reaching Commercial Scale in Biofuels

### FTE Services Revenue Dependent on Shell's R&D Funding

A multi-year research and development collaboration agreement with Shell has been in place since 2006. The agreement allows for Codexis to receive from Shell a direct reimbursement of R&D costs based on the number of FTEs working on development of cellulases and other biocatalysts to be used in biofuels production. The agreement has been expanded significantly twice since inception, with average FTEs increasing from 13 during 2007 to 62 during 2008, and then, with Shell's March 2009 agreement, to 128 FTEs. Codexis receives R&D reimbursement on a set amount per FTE, with payments subject to a CPI-based annual adjustment.

The agreement to work exclusively with Shell lasts until November 2012, but Shell has the option to decrease FTEs beginning in November of 2010. Under the research agreement, Shell may increase or decrease the number of FTEs at its discretion. Given Shell's past commitment of resources and progressive build out of the relationship, we model FTE growth up to an average of 150 FTEs in 2011 and then growth of the FTE revenue based on assumptions of CPI adjustments.

### Exhibit 5: Shell R&D Funding Based on Number of FTEs

Funding Driven by FTE Step Up to 150 by 2011 with Subsequent Funding Changes Based On CPI Adjustments

	FY09A	FY10E	FY11E	FY12E	FY13E	FY14E	FY15E
Number of FTEs - US	100	100	120	120	120	120	120
<u>Number of FTEs - Hungary</u>	<u>28</u>	<u>28</u>	<u>30</u>	<u>30</u>	<u>30</u>	<u>30</u>	<u>30</u>
Total Number of FTEs	128	128	150	150	150	150	150
Annual Revenue / FTE - US (000's)	\$441	\$447	\$454	\$466	\$481	\$496	\$511
Annual Revenue / FTE - Hungary (000's)	\$350	\$361	\$373	\$388	\$407	\$428	\$449
CPI Adjustment - US		1.25%	1.75%	2.50%	3.25%	3.25%	3.00%
CPI Adjustment - Hungary		3.00%	3.50%	4.00%	5.00%	5.00%	5.00%
<b>Bio Fuel FTE Services Revenue (\$000's)</b>	<b>53,535</b>	<b>54,323</b>	<b>63,184</b>	<b>66,618</b>	<b>68,723</b>	<b>71,165</b>	<b>73,622</b>
Bio Fuel FTE Services Growth		1.47%	16.31%	5.44%	3.16%	3.55%	3.45%

Source: Company reports, RBC Capital Markets estimates

### Option on Commercialization of Technology Drives Revenue in 2013 and Beyond

The end goal of Shell providing R&D research reimbursement is to develop Codexis technology to reach commercial scale for biofuel production. Codexis will receive a royalty fee for every gallon of fuel that Shell produces using Codexis technology if Shell chooses to commercialize the technology. The royalty fees are based on the price of oil and are indexed based on average oil prices between November 2007 and the date of the first commercial sale. The royalty fees are positively correlated to the index indicating that rising oil prices during the time between testing and commercialization will result in higher royalty fees paid to Codexis. **We estimate that Codexis will earn in the range of 2 – 5 c/gallon at commercialization volumes. Our 2 – 5 c/gallon estimate is a combination of royalty streams from biomass to sugar and sugar to hydrocarbons, two separate biocatalysts that Codexis is developing.** Pace and volume of production will be determined by Shell based on variables including the amount of subsidies, the price of oil, the spread between gasoline and diesel, and feedstock prices. We expect production of biofuels to begin in earnest in 2013 and ramp up significantly in time as additional production plants come on line.



**Exhibit 6: Biofuel Revenues ex FTE Reimbursement**

Biofuel Production Estimated to Begin in 2013 with Meaningful Revenue Contribution as Production Ramps

	FY10E	FY11E	FY12E	FY13E	FY14E	FY15E
Biofuel Revenues ex FTE (000's)						
Biofuel Royalties						
Gallons Produced (000's)	-	-	2,000	30,000	95,000	150,000
Royalty per Gallon	<u>\$0.04</u>	<u>\$0.04</u>	<u>\$0.02</u>	<u>\$0.01</u>	<u>\$0.03</u>	<u>\$0.05</u>
Biofuel Royalty Revenues	-	-	32	158	3,183	6,900
Biofuel Milestone Revenue	5,200	4,520	5,900	12,500	2,000	5,800
Biofuel Technology Access Fee	4,100	4,100	3,400	-	-	-
Biofuel Enzyme Sales	<u>-</u>	<u>-</u>	<u>540</u>	<u>9,000</u>	<u>30,000</u>	<u>40,000</u>
<b>Total Biofuel Revenue ex FTE (000's)</b>	<b>9,300</b>	<b>8,620</b>	<b>9,872</b>	<b>21,658</b>	<b>35,183</b>	<b>52,700</b>

Source: RBC Capital Markets estimates

After the collaborative R&D agreement with Shell, Codexis will also retain the right of first negotiation to supply cellulase biocatalysts to Shell and to supply these biocatalysts to unrelated third parties. We believe that any supply contracts with Shell will allow for Codexis to negotiate a product sales price on a “cost-plus” basis that would allow for a specified range of gross margin to be realized. The product revenue from these contracts would provide an additional source of upside to revenue on successful commercialization of biofuel production.

In the interim period between testing and commercialization, the company may also receive total milestone payments of approximately \$35 million during the remaining term of the agreement with Shell. These payments are contingent on Codexis meeting certain technical and commercial goals throughout the development process. Codexis has met each technical and commercial milestone to date under the agreement, and the company recorded total milestone payments of \$4.6 million during 2009.

**As Exhibit 6 shows, we model Shell starting a 100 million gallon/year plant in 2012, ramping in 2013 to 30 million gallons of commercial-grade production.**

**Strategic Relationships Provide Advantages in Production and Distribution**

Shell has contributed significant resources to relationships with Cosan and Iogen focused on large-scale production and distribution of biofuels. Capex associated with the development of these projects is largely borne by Shell providing Codexis with low-cost access to a vast biofuel infrastructure.

Shell is working to reach commercial-scale production of biofuels through its relationship with Iogen, which is a leading North America cellulosic plant developer that Shell has had an equity stake in since 2002. Iogen opened the world's first demonstration commercial cellulosic ethanol plant in Ottawa in 2004 where ethanol fuel is made from agricultural residue. The plant is designed to process 20–30 tons/day of feedstock and produce 5,000 to 6,000 litres of cellulosic ethanol/day at full capacity. Shell is currently considering further investment in a full-scale cellulosic ethanol plant and is contributing to Iogen's feasibility and design assessment work.

A recent, \$12 billion, multi-year joint venture with Cosan is designed to improve access to ethanol assets and global distribution of biofuels for Shell. The Shell/Cosan joint venture is now the largest producer of Brazilian Sugarcane in the world with total annual production of 52.6 million tons representing a 9.3% share of the crushed sugarcane market. The joint venture also holds a leading position in the Brazilian fuels distribution market with a market share of 18.2%. Assets contributed by Cosan include several cogeneration plants including seven existing, two under construction and six to be built in the next three to four years.

**U.S. Federal Law Pushing for Growth in Biofuels****Aggressive Biofuel Production Mandated by Environmental Protection Act**

The United States is the world's largest producer of ethanol with 10.6 billion gallons of ethanol produced during 2009 and with total capacity at the end of 2009 to produce 11.9 billion gallons/year. The market for ethanol production is highly concentrated with the United States and Brazil together accounting for 88% of total global production during 2009. The significant role of the United States in the global ethanol market is increasingly shaped by policy initiatives.

Federal law has been put in place to ensure that the United States continues to ramp up production of biofuels in the coming years, as policy makers push to make the United States more diverse and self-reliant in its energy portfolio. The new renewable fuel standard put forth in the Environmental Protection Act of 2007 (RFS II) outlines the aggressive mandate of moving total annual U.S. renewable fuel production from a target of 11.1 billion gallons in 2009 to 36.0 billion gallons by 2022.



Policy goals in the United States have historically been ambitious with regards to renewable fuel production targets. The Energy Policy Act of 2005 introduced the first Renewable Fuel Standard (RFS I), which served to outline requirements for annual renewable fuel production. RFS I outlined annual production goals of 8.6 billion gallons of renewable fuels by 2022 but provided no mandate on types of feedstock used as supply for ethanol production. With corn accounting for 98% of the feedstock used in ethanol production in the United States, the consequences of an aggressive production ramp up in biofuels can be felt throughout the economy as evidenced by the sharp run-up in corn prices experienced during 2007.

In an effort to continue to push renewable fuel standards but to mitigate the knock-on effects of higher corn prices, Congress passed the Environmental Protection Act of 2007. The Act introduced RFS II, which effectively mandated a “cap” on the use of conventional renewables such as corn in ethanol production by requiring all of the increase in the RFS II targets in 2016 and beyond to be met with advanced biofuels. This requirement results in an increase in the use of cellulosic biofuels in ethanol production.

#### Exhibit 7: U.S. Renewable Fuel Standards

RFS II Modifies RFS I and Calls for Increases in both Renewable Fuel Production and Mix of Cellulosic Biofuels

	RFS I (Prior Standard)	RFS II (Current Standard)
Renewable Fuel Production by 2022	8,600	36,000
Cellulosic Biofuel Production	250	16,000
Conventional Renewable Fuel Cap	None	Capped in 2016

Annual Production in Millions of Barrels

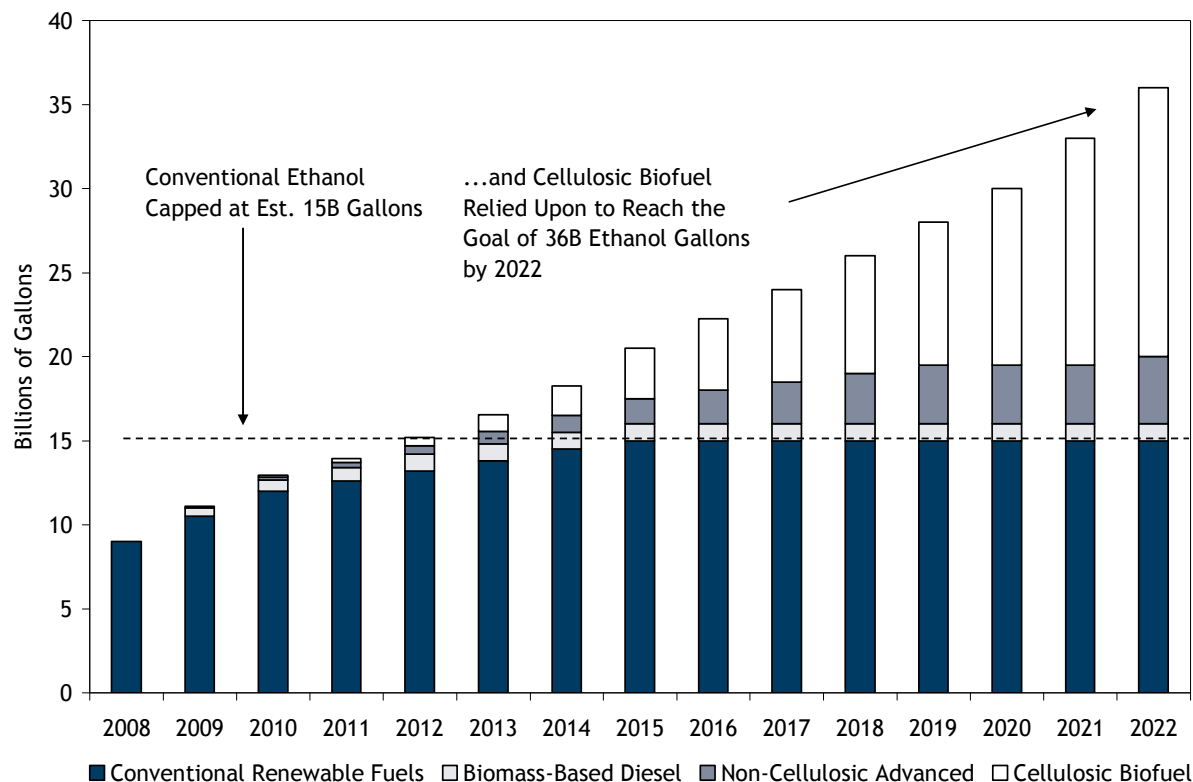
Source: Energy Policy Act of 2005, Energy Independence and Security Act of 2007, RBC Capital Markets

#### Non-Feedstock Biofuels Increasing in Mix and Driving Production Growth

Production requirements set out by RFS II call for an increasing use of advanced biofuels to meet rapidly growing ethanol production standards. Use of “conventional” renewables becomes capped beginning in 2016, and advanced biofuels become more heavily relied on in the out years. The EPA estimates that ethanol production from conventional renewables will reach 15 billion gallons by 2015 before becoming capped. The result is a call for rapid expansion of cellulosic biofuel production in 2016 and beyond in order to meet 2022 annual renewable fuel production goals of 36 billion gallons.

#### Exhibit 8: U.S. Renewable Volume Standards Set Forth by RFS II

Aggressive Growth Requirements Become Increasingly Met by Cellulosic Biofuels as Conventional Fuels Are Capped



Source: Environmental Protection Agency, Energy Independence and Security Act of 2007, RBC Capital Markets

## Valuation

We approach Codexis valuation using a sum-of-the-parts methodology, splitting our 2013 estimates into two business segments: pharma and bio-industrials. Our analysis of each business segment's contribution to 2013 estimates is shown below in Exhibit 9.

### Exhibit 9: 2013 Business Segment Analysis

Estimated Contribution of Pharma and Bioindustrials Segments to 2013 Revenue and EBITDA

2013 Analysis	Pharma	BioIndustrials	Total
Revenue	102,740	110,380	213,120
COGS	<u>58,400</u>	<u>8,378</u>	<u>66,778</u>
Gross Profit	44,340	102,002	146,341
<b>Operating Expenses</b>			
R&D	15,582	62,326	77,908
Operations	3,674	5,512	9,186
SG&A	<u>19,109</u>	<u>19,109</u>	<u>38,218</u>
Total Operating Expenses	38,365	86,947	125,312
Operating Income (EBIT)	5,975	15,055	21,030
% of total	28%	72%	
Depreciation & Amort	8,517	8,517	17,034
<b>EBITDA</b>	<b>14,492</b>	<b>23,572</b>	<b>38,064</b>
Net Income	<b>6,216</b>	<b>15,661</b>	<b>21,877</b>
<b>EPS</b>	<b>0.18</b>	<b>0.45</b>	<b>0.63</b>

Source: RBC Capital Markets estimates

Our valuation methodology employs EV/EBITDA, EV/Sales and P/E multiples for both the pharma and the bio-industrials business segments. We derive our valuation multiples from public comparables shown in Exhibit 11. We apply these multiples to our 2013 estimates, which we believe are the most representative of the company's intrinsic value given the commercialization timeline of the biofuels segment. Valuation for the pharma segment employs 11.5x EV/EBITDA, 3.25x EV/Sales and 19x P/E on our 2013 estimates. Valuation for the bio-industrials segment employs 13x EV/EBITDA, 1.25x EV/Sales and 26x P/E on our 2013 estimates. We then discount back to present value at a 10% discount rate for pharma and an 18% discount rate for bio-industrials to arrive at our price target of \$14.

We believe the pharma business segment on its own represents a compelling opportunity given its pipeline and its established and growing relationship with key pharmaceutical industry players. In our exercise of analyzing each business segment separately, we examined the value of the company as a whole in a "worst case" scenario in which no material revenue opportunities develop from Shell or any other relationships within the bioindustrials segment. We believe that in this scenario, the pharma business on a stand-alone basis provides valuation support in the \$5 - \$7 range based upon our assumed EBITDA multiples.

## Exhibit 10: Valuation Multiples

Three valuation methodologies provide an equity valuation of \$13 - \$15 per share

<u>EV/EBITDA</u>	<u>Pharma</u>	<u>BioIndustrials</u>	<u>Enterprise Value</u>	<u>Implied Equity Value</u>	<u>Diluted Shares Outstanding</u>	<u>Implied Equity Value / Share</u>
EV/EBITDA Multiple	11.50	13.00				
Discount Rate	10%	18%				
2013 Valuation	131,771	345,856	477,627			
2011 Disc Val	106,735	232,554	339,288	470,330	34,135	\$13.78

<u>EV/Sales</u>	<u>Pharma</u>	<u>BioIndustrials</u>	<u>Enterprise Value</u>	<u>Implied Equity Value</u>	<u>Diluted Shares Outstanding</u>	<u>Implied Equity Value / Share</u>
EV/Sales Multiple	3.25	1.25				
2013 Valuation	333,904	137,975	471,880			
2011 Disc Val	270,463	92,774	363,237	494,279	34,135	\$14.48

<u>P/E</u>	<u>Pharma</u>	<u>BioIndustrials</u>	<u>Enterprise Value</u>	<u>Implied Equity Value</u>	<u>Diluted Shares Outstanding</u>	<u>Implied Equity Value / Share</u>
Net Income	3,060	18,817				
P/E Multiple	19.00	26.00				
2013 Valuation	58,138	489,245	547,383			
2011 Disc Val	47,092	328,968	376,060	507,102	34,135	\$14.86

Source: RBC Capital Markets estimates

## Exhibit 11: Public Comparables

Company	Ticker	US\$ Equiv. Price	Market Cap	Enterprise Value	SALES (2010E)	SALES (2011E)	EPS (2010E)	EPS (2011E)	EBITDA (2010E)	EBITDA (2011E)	EV / Sales (2010E)	EV / Sales (2011E)	EV / EBITDA (2010E)	EV / EBITDA (2011E)	P/E (2010E)	P/E (2011E)
Reagents																
Converted to \$U.S. Equiv. per Closing Day's Exchange Rate (\$000's except EPS, price)																
Life Technologies Corporation	LIFE	\$50.06	\$9,141	\$11,517	\$3,607	\$3,845	\$3.45	\$3.82	\$1,357	\$1,408	3.2x	3.0x	8.5x	8.2x	14.5x	13.1x
Sigma-Aldrich Corporation	SIAL	\$53.32	\$6,472	\$6,633	\$2,258	\$2,393	\$3.14	\$3.43	\$654	\$716	2.9x	2.8x	10.1x	9.3x	17.0x	15.5x
Millipore Corp.	MIL	\$106.21	\$5,973	\$6,619	\$1,785	\$1,893	\$4.51	\$4.97	\$478	\$494	3.7x	3.5x	13.9x	13.4x	23.6x	21.4x
Novozymes A/S	NZYM B	\$107.25	\$6,668	\$6,828	\$1,525	\$1,642	\$3.80	\$4.09	\$424	\$457	4.5x	4.2x	16.1x	14.9x	28.2x	26.2x
Qiagen NV	QGEN	\$21.08	\$4,900	\$5,404	\$1,164	\$1,299	\$0.91	\$1.09	\$403	\$450	4.6x	4.2x	13.4x	12.0x	23.1x	19.4x
Techne Corp.	TECH	\$60.55	\$2,258	\$2,218	\$270	\$287	\$2.89	\$3.05	\$164	\$178	8.2x	7.7x	13.5x	12.5x	21.0x	19.9x
Company Avg. Comps											4.5x	4.2x	12.6x	11.7x	21.2x	19.3x

Company		US\$ Equiv. Price	Market Cap	Enterprise Value	SALES (2010E)	SALES (2011E)	EPS (2010E)	EPS (2011E)	EBITDA (2010E)	EBITDA (2011E)	EV / Sales (2010E)	EV / Sales (2011E)	EV / EBITDA (2010E)	EV / EBITDA (2011E)	P/E (2010E)	P/E (2011E)
Alt Energy		Converted to \$U.S. Equiv. per Closing Day's Exchange Rate (\$000's except EPS , price)														
Cosan S. A. Indústria e Comércio	CSAN3	\$11.29	\$4,586	\$6,792	\$8,271	\$9,205	\$1.04	\$1.10	\$849	\$1,193	0.8x	0.7x	8.0x	5.7x	10.8x	10.3x
Covanta Holding Corporation	CVA	\$15.43	\$2,402	\$4,471	\$1,772	\$1,800	\$0.64	\$0.75	\$547	\$572	2.5x	2.5x	8.2x	7.8x	23.9x	20.6x
A123 Systems, Inc.	AONE	\$9.10	\$950	\$1,036	\$138	\$252	(\$1.14)	(\$0.89)	(\$102)	(\$38)	7.5x	4.1x				
EnerNOC, Inc.	ENOC	\$28.10	\$692	\$612	\$280	\$337	\$0.45	\$1.01	\$25	\$44	2.2x	1.8x	24.7x	13.9x	63.1x	27.8x
Fuel Systems Solutions, Inc.	FSYS	\$26.73	\$471	\$509	\$445	\$466	\$2.42	\$2.07	\$78	\$68	1.1x	1.1x	6.5x	7.5x	11.0x	12.9x
CROPENERGIES AG	CEZ	\$4.19	\$356	\$612	\$541	\$574	\$0.03	\$0.34	\$43	\$84	1.1x	1.1x	14.2x	7.3x		12.4x
Green Plains Renewable Energy, Inc	GPPE	\$11.11	\$348	\$722	\$1,725	\$1,922	\$1.51	\$1.57	\$118	\$131	0.4x	0.4x	6.1x	5.5x	7.3x	7.1x
Comverge, Inc.	COMV	\$9.54	\$240	\$256	\$132	\$137	(\$0.52)	\$0.06	(\$6)	\$12	1.9x	1.9x		21.9x		
Company Avg. Comps											2.2x	1.7x	11.3x	9.9x	23.2x	15.2x

Company		US\$ Equiv. Price	Market Cap	Enterprise Value	SALES (2010E)	SALES (2011E)	EPS (2010E)	EPS (2011E)	EBITDA (2010E)	EBITDA (2011E)	EV / Sales (2010E)	EV / Sales (2011E)	EV / EBITDA (2010E)	EV / EBITDA (2011E)	P/E (2010E)	P/E (2011E)
Life Science Tools		Converted to \$U.S. Equiv. per Closing Day's Exchange Rate (\$000's except EPS , price)														
Life Technologies Corporation	LIFE	\$50.06	\$9,141	\$11,517	\$3,607	\$3,845	\$3.45	\$3.82	\$1,357	\$1,408	3.2x	3.0x	8.5x	8.2x	14.5x	13.1x
Millipore Corp.	MIL	\$106.21	\$5,973	\$6,619	\$1,785	\$1,893	\$4.51	\$4.97	\$478	\$494	3.7x	3.5x	13.9x	13.4x	23.6x	21.4x
Hologic Inc.	HOLX	\$14.90	\$3,860	\$5,757	\$1,671	\$1,759	\$1.19	\$1.31	\$658	\$645	3.4x	3.3x	8.7x	8.9x	12.6x	11.4x
Gen-Probe Inc.	GPRO	\$43.96	\$2,181	\$2,256	\$559	\$608	\$2.18	\$2.49	\$197	\$209	4.0x	3.7x	11.5x	10.8x	20.1x	17.7x
Cepheid	CPHD	\$17.88	\$1,062	\$998	\$205	\$245	(\$0.25)	\$0.16	(\$9)	\$15	4.9x	4.1x				
Luminex Corporation	LMNX	\$17.13	\$717	\$599	\$144	\$175	\$0.24	\$0.44	\$27	\$44	4.2x	3.4x	22.4x	13.6x		39.3x
Genomic Health Inc.	GHDX	\$15.00	\$432	\$449	\$183	\$220	\$0.02	\$0.33	\$7	\$18	2.4x	2.0x	61.0x	25.6x		46.0x
Celera Corporation	CRA	\$7.07	\$580	\$267	\$147	\$167	(\$0.22)	(\$0.10)	(\$12)	\$3	1.8x	1.6x				
Affymetrix Inc.	AFFX	\$6.55	\$464	\$466	\$340	\$357	\$0.01	\$0.17	\$49	\$61	1.4x	1.3x	9.6x	7.7x		39.0x
Company Avg. Comps											3.2x	2.9x	19.4x	12.6x	17.7x	26.8x

Source: Capital IQ

## Price Target Impediments

- Future product revenues and royalties from biofuels are contingent on Shell's commercialization of biocatalysts developed by Codexis. Failure to reach commercialization or reduction in R&D funding will limit revenues that can be achieved from the Bio-industrials business segment.
- Lower prices of traditional sources of energy such as oil could potentially reduce the demand for alternative sources of energy, which would lower the outlook for biofuel production.
- Low levels of adoption of biocatalysts in pharma manufacturing could result in significantly lower growth rates than we are forecasting for pharma product and service revenue.
- An inability of biofuel production to meet regulatory requirements would result in a lower than expected growth rate for the biofuels industry.

## Management

**CEO:** Dr. Alan Shaw has served as President of Codexis since its inception and as CEO since 2002. Dr. Shaw has served in various scientific and management positions throughout his career, including time as Managing Director for Lancaster Synthesis and COO of Archimica, the pharmaceutical chemicals division of BTP. He holds a BS in chemistry from Teesside University, a PhD in chemistry from the University of Durham and is a Fellow of the Royal Society of Chemistry.

**CFO:** Robert Lawson has served as SVP and CFO since November 2009. Prior to Codexis, Mr. Lawson was with Intuit from 2001 to 2009 in various senior financial management positions. He was with GE for 15 years serving in various financial management roles. He holds a BS in business from Iowa State University.

**SVP, R&D:** Dr. David Anton has served as SVP of Research and Development since May 2009. Dr. Anton has more than 25-years experience, and has held a variety of senior research management positions across bioprocessing and biocatalysts. He holds a BS in biochemistry from the University of California, Berkeley, and a PhD in biochemistry from the University of Minnesota.



## Valuation

Our valuation methodology employs EV/EBITDA, EV/Sales, and P/E multiples for both the pharma and the bioindustrials business segments. We derive our valuation multiples from public comparables and apply the multiples to our 2013 estimates, which we believe are the most representative of the company's intrinsic value given commercialization of the biofuels segment. Valuation for the pharma segment employs an EV/EBITDA multiple of 11.5x, an EV/Sales multiple of 3.25x, and a P/E multiple of 19x on our 2013 estimates. Valuation for the bioindustrials segment employs an EV/EBITDA multiple of 13x, EV/Sales multiple of 1.25x, and a P/E multiple of 26x on our 2013 estimates. We then discount back to present value at a 10% discount rate for pharma and a 18% discount rate for bioindustrials to arrive at our price target of \$14.

## Price Target Impediment

- Future product revenues and royalties from biofuels are contingent upon Shell's commercialization of biocatalysts developed by Codexis. Failure to reach commercialization or reduction in R&D funding will limit revenues that can be achieved from the Bioindustrials business segment.
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- Inability of biofuel production to meet regulatory requirements would result in a lower than expected growth rate for the biofuels industry.

## Company Description

Codexis commenced operations in March 2002 after being incorporated in January 2002 as a wholly owned subsidiary of Maxygen, Inc. The company operates a proprietary technology platform that enables the creation of optimized biocatalysts that make existing industrial manufacturing processes faster, cleaner, and more efficient than current methods. Codexis has commercialized its biocatalysts in the pharmaceutical industry and is developing biocatalysts for use in producing advanced biofuels under a multi-year research and development collaboration with Shell.

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stuart.bush@rbccm.com

Codexis, Inc.  
CDXS

	Fiscal Year 2010				Fiscal Year 2011				Annual Results				
	Q110A Mar-10	Q210E Jun-10	Q310E Sep-10	Q410E Dec-10	Q111E Mar-11	Q211E Jun-11	Q311E Sep-11	Q411E Dec-11	FY09A	FY10E	FY11E	FY12E	FY13E
<b>Revenues</b>													
Pharma	6,936.0	6,981.4	7,563.1	8,144.9	10,569.9	11,530.8	12,491.7	13,452.6	19,988.0	29,625.4	48,045.1	81,388.6	102,739.8
Bioindustrials	16,042.0	14,441.7	14,961.7	17,821.7	16,930.9	16,940.9	17,402.9	21,028.9	62,874.8	63,267.0	72,303.6	84,489.6	110,380.0
Grants	2,722.0	400.0	-	-	831.0	-	-	207.8	45.8	3,122.0	1,038.8	2,832.2	-
<b>Total Revenues</b>	<b>25,700.0</b>	<b>21,823.0</b>	<b>22,524.8</b>	<b>25,966.6</b>	<b>28,331.9</b>	<b>28,471.7</b>	<b>29,894.6</b>	<b>34,689.3</b>	<b>82,908.6</b>	<b>96,014.4</b>	<b>121,387.5</b>	<b>168,710.3</b>	<b>213,119.9</b>
Sequential Growth	6.0%	(15.1%)	3.2%	15.3%	9.1%	0.5%	5.0%	16.0%	-	15.8%	26.4%	39.0%	26.3%
YoY Growth	32.4%	13.7%	12.3%	7.1%	10.2%	30.5%	32.7%	33.6%	-	-	-	-	-
<b>Cost of Revenues</b>	<b>5,218.0</b>	<b>4,137.7</b>	<b>4,367.6</b>	<b>4,703.5</b>	<b>6,381.3</b>	<b>6,961.4</b>	<b>7,541.5</b>	<b>8,121.6</b>	<b>16,678.1</b>	<b>18,426.8</b>	<b>29,005.7</b>	<b>48,990.1</b>	<b>66,778.4</b>
<b>Gross Profit</b>	<b>20,482.0</b>	<b>17,685.3</b>	<b>18,157.2</b>	<b>21,263.0</b>	<b>21,950.6</b>	<b>21,510.3</b>	<b>22,353.1</b>	<b>26,567.7</b>	<b>66,230.5</b>	<b>77,587.6</b>	<b>92,381.7</b>	<b>119,720.2</b>	<b>146,341.4</b>
Total Gross Margin	79.7%	81.0%	80.6%	81.9%	77.5%	75.5%	74.8%	76.6%	79.9%	80.8%	76.1%	71.0%	68.7%
<b>Other Operating Expenses</b>													
R&D	10,982.0	11,278.5	11,594.3	11,930.5	12,527.1	13,153.4	13,837.4	14,570.8	45,861.0	45,785.4	54,088.7	60,057.4	67,426.7
Operations	2,000.0	2,064.0	2,132.1	2,202.5	2,257.5	2,314.0	2,383.4	2,454.9	8,864.2	8,398.6	9,409.8	14,370.8	10,298.9
SG&A	8,600.0	8,449.5	8,660.7	8,877.3	9,134.7	9,416.0	9,717.4	10,047.7	29,871.1	34,587.5	38,315.8	40,889.4	47,587.5
Total Operating Expenses	21,582.0	21,792.0	22,387.2	23,010.3	23,919.3	24,883.4	25,938.2	27,073.4	84,596.3	88,771.5	101,814.3	115,317.6	125,313.1
Sequential Growth	(10.7%)	1.0%	2.7%	2.8%	4.0%	4.0%	4.2%	4.4%	-	-	-	-	-
<b>EBITDA</b>	<b>738.0</b>	<b>(2,077.3)</b>	<b>(2,031.5)</b>	<b>535.8</b>	<b>216.7</b>	<b>(1,092.7)</b>	<b>(1,114.5)</b>	<b>2,059.8</b>	<b>(12,345.0)</b>	<b>(2,835.0)</b>	<b>69.3</b>	<b>19,441.6</b>	<b>38,062.7</b>
EBITDA Margin	2.9%	(9.5%)	(9.0%)	2.1%	0.8%	(3.8%)	(3.7%)	5.9%	(14.9%)	(3.0%)	0.1%	11.5%	17.9%
YoY Growth	-	(104.9%)	47.0%	-	(70.6%)	47.4%	45.1%	284.4%	-	77.0%	-	27963.1%	95.8%
<b>Operating Income (EBIT)</b>	<b>(1,100.0)</b>	<b>(4,106.7)</b>	<b>(4,229.9)</b>	<b>(1,747.2)</b>	<b>(1,968.7)</b>	<b>(3,373.1)</b>	<b>(3,585.0)</b>	<b>(505.8)</b>	<b>(18,365.8)</b>	<b>(11,183.9)</b>	<b>(9,432.6)</b>	<b>4,402.6</b>	<b>21,028.3</b>
Operating Margin	(4.3%)	(18.8%)	(18.8%)	(6.7%)	(6.9%)	(11.8%)	(12.0%)	(1.5%)	(22.2%)	(11.6%)	(7.8%)	2.6%	9.9%
Sequential Growth	76.7%	(273.3%)	(3.0%)	58.7%	(12.7%)	(71.3%)	(6.3%)	85.9%	-	-	-	-	-
<b>Other Income (Expense)</b>													
Interest Income	28.0	55.7	94.4	162.7	473.8	443.7	415.7	392.4	179.7	340.8	1,725.6	2,207.9	2,626.0
Interest Expense	(358.0)	(210.7)	(174.1)	(142.4)	(113.2)	(98.5)	(81.5)	(71.2)	(1,413.5)	(885.2)	(364.4)	(232.5)	(232.5)
Interest (Net)	(330.0)	(155.0)	(79.7)	20.3	360.6	345.2	334.2	321.2	(1,233.8)	(544.4)	1,361.2	1,975.4	2,393.5
Other (Net)	-	162.0	162.0	162.0	(118.0)	(118.0)	(118.0)	(119.0)	(623.6)	486.0	(473.0)	(440.0)	(444.8)
Total Other Income (Expense)	(330.0)	7.0	82.3	182.3	242.6	227.2	216.2	202.2	(1,857.4)	(58.4)	888.2	1,535.4	1,948.7
<b>Pretax Income (EBT)</b>	<b>(1,430.0)</b>	<b>(4,099.7)</b>	<b>(4,147.6)</b>	<b>(1,564.9)</b>	<b>(1,726.1)</b>	<b>(3,145.9)</b>	<b>(3,368.8)</b>	<b>(303.6)</b>	<b>(20,223.2)</b>	<b>(11,242.2)</b>	<b>(8,544.4)</b>	<b>5,938.0</b>	<b>22,977.0</b>
<b>Income Taxes (Benefit)</b>	<b>(61.0)</b>	<b>149.5</b>	<b>149.5</b>	<b>149.5</b>	<b>192.7</b>	<b>192.7</b>	<b>192.7</b>	<b>192.7</b>	<b>65.8</b>	<b>387.5</b>	<b>770.8</b>	<b>1,100.0</b>	<b>1,100.0</b>
<b>Net Income</b>	<b>(1,369.0)</b>	<b>(4,249.2)</b>	<b>(4,297.1)</b>	<b>(1,714.4)</b>	<b>(1,918.8)</b>	<b>(3,338.6)</b>	<b>(3,561.5)</b>	<b>(496.3)</b>	<b>(20,289.0)</b>	<b>(11,629.7)</b>	<b>(9,315.2)</b>	<b>4,838.0</b>	<b>21,877.0</b>
<b>EPS from Cont. Ops</b>	<b>(0.05)</b>	<b>(0.14)</b>	<b>(0.12)</b>	<b>(0.05)</b>	<b>(0.06)</b>	<b>(0.10)</b>	<b>(0.10)</b>	<b>(0.01)</b>	<b>(0.58)</b>	<b>(0.33)</b>	<b>(0.27)</b>	<b>0.14</b>	<b>0.63</b>
<b>Extraordinary Items</b>													
Foreign Exchange Gain (Loss)	-	-	-	-	-	-	-	-	59.4	-	-	-	-
Warrants FV Adjustment	(396.0)	(162.7)	(162.7)	(162.7)	-	-	-	-	(716.2)	(884.1)	-	-	-
Total Extraordinary Items	(396.0)	(162.7)	(162.7)	(162.7)	-	-	-	-	(623.6)	(884.1)	-	-	-
<b>Net Income to Common (GAAP)</b>	<b>(973.0)</b>	<b>(4,086.4)</b>	<b>(4,134.4)</b>	<b>(1,551.7)</b>	<b>(1,918.8)</b>	<b>(3,338.6)</b>	<b>(3,561.5)</b>	<b>(496.3)</b>	<b>(19,665.4)</b>	<b>(10,745.6)</b>	<b>(9,315.2)</b>	<b>4,838.0</b>	<b>21,877.0</b>
EPS from Extraordinary Items	0.01	0.01	0.00	0.00	-	-	-	-	0.02	0.03	-	-	-
<b>EPS to Common (GAAP)</b>	<b>(0.03)</b>	<b>(0.14)</b>	<b>(0.12)</b>	<b>(0.04)</b>	<b>(0.06)</b>	<b>(0.10)</b>	<b>(0.10)</b>	<b>(0.01)</b>	<b>(0.56)</b>	<b>(0.31)</b>	<b>(0.27)</b>	<b>0.14</b>	<b>0.63</b>
<b>Average Shares Outstanding - Diluted</b>	<b>27,910</b>	<b>30,210</b>	<b>34,810</b>	<b>34,810</b>	<b>34,810</b>	<b>34,810</b>	<b>34,810</b>	<b>34,810</b>	<b>34,810</b>	<b>34,810</b>	<b>34,810</b>	<b>34,810</b>	<b>34,810</b>

Source: Company Reports, RBC Capital Market estimates

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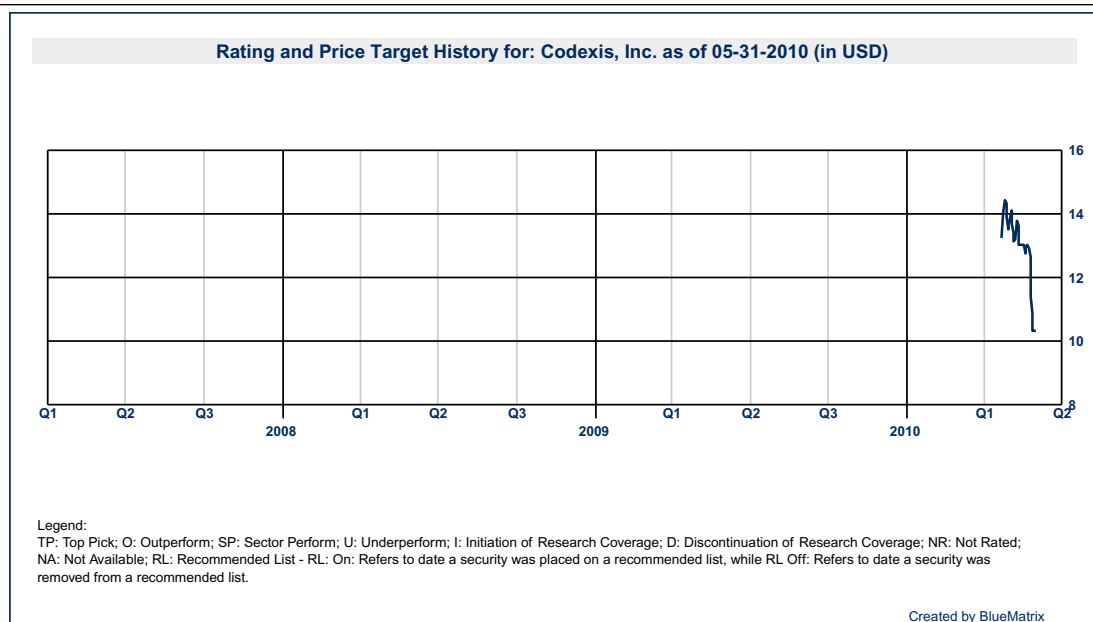
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