INTEGRATED DNA TECHNOLOGIES
SUSTAINABILITY REPORT 2013
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©2014 Integrated DNA Technologies
Integrated DNA Technologies (IDT) was founded 27 years ago as a University of Iowa spin-off to conduct contract research. Today, IDT is the world’s largest supplier of custom DNA and RNA based products for research and diagnostic use. As The Custom Biology Company™, we enable new discoveries in biology and medicine by providing leading scientists and researchers worldwide with synthetic nucleic acids (commonly called oligonucleotides or “oligos”) which are the “picks and shovels” necessary for virtually all molecular biology applications.

Our Baseline Year for Sustainability. 2013 was a year of tremendous growth and change for IDT, capped by our formal expansion into the Asia-Pacific region through the acquisition of our Singapore distributor. We recognized the unique challenges that come with global growth, and the importance of creating a fully engaged employee base as key to our expansion. To address these concerns, we formed a cross functional team to assess our sustainability performance goals and objectives. We strategized to identify and prioritize the most important environmental and social issues facing IDT at this time. We decided—wisely, I think—to absorb and direct global growth over the next year by deepening our primary relationships with our customers, employees, and business partners. To accomplish this, we have focused on three strategic goals:

1. Enhancing and personalizing our customers’ experience,
2. Driving product value and innovation, and
3. Extending our unique organizational culture globally.

What follows are some highlights and near-term objectives for these strategic sustainability goals.
FROM THE CHIEF EXECUTIVE OFFICER

Enhancing and personalizing our customers’ experience. Our global expansion allows us to provide multilingual support and accessible customer service hours throughout North America, Europe, and Asia-Pacific. We aim to ensure that our customers receive the same unrivalled quality of service wherever they are in the world.

Driving product value and innovation. One of our most successful 2013 products, gBlocks® Gene Fragments, were the first commercially available sequence-verified, double-stranded, long oligonucleotides on the market. They represent a major milestone for synthetic biology, allowing scientists to more quickly and efficiently construct genes required for life science and clinical research. Read more >

Extending our unique organizational culture globally. Central to IDT’s identity are our philosophy of collaboration and our deep commitment to environmental stewardship and corporate philanthropy.

Collaboration. IDT believes collaboration is key to creating an engaged culture of sustainability. Employees at our Coralville facility worked together for better personal and community health by starting and maintaining an on-site community garden that yielded over 5000 lb of fresh produce. Read more >

Environmental Stewardship. Our commitment to environmental stewardship has supported our desire to reduce oligo costs for our customers. A geothermal system at our primary manufacturing facility in Coralville, Iowa, significantly lowers heating, ventilation, and air conditioning costs. Additionally, we have implemented an Environmental Management System (EMS) at our Coralville facility to achieve further cost savings through energy efficiency and waste reduction initiatives. This EMS was certified as ISO 14001 compliant in 2012 and recertified in 2013.

Philanthropy. Another sustaining value for IDT has been our constant desire to give back to the communities where we are located in a way that is consistent with our mission. During 2013, we were privileged to be able to gift the University of Iowa’s Children’s Hospital with $1 million for its new Neonatal Intensive Care Unit (NICU). Through this gift, IDT generously affirmed its commitment to biomedical research and availability of premier healthcare for IDT families and the Coralville community.

As a result of all these efforts, IDT has been selected for consecutive years as one of the best places to work, locally and globally. We are proud of what we have achieved together with our employees and business partners. We hope our first sustainability report makes clear our plans for a sustainable and prosperous future at IDT. We will continue to report annually on how we intend to exceed our customers’ expectations year after year with unmatched value, service, and innovation.

Sincerely,

Dr Joseph Walder, MD, PhD
Chief Executive Officer
COMPANY OVERVIEW

Now in its 27th year, Integrated DNA Technologies, Inc. (IDT) is the world's largest provider of custom nucleic acid products, serving the areas of academic and commercial research, biotechnology, clinical diagnostics, and pharmaceutical development. In 2013, IDT manufactured and delivered an average of 44,000 custom nucleic acids per day to more than 82,000 customers worldwide from our manufacturing facilities in Coralville, IA, and San Diego, CA, USA; Leuven, Belgium; and Singapore. Keeping our business and sustainability focus on our core vision of enabling scientific discovery, we continue with our mission to develop innovative products while providing unmatched product value, excellent delivery times, and personalized customer service.

Founded by CEO and President, Dr Joseph Walder, MD, PhD, a pioneering visionary with more than 50 peer-reviewed articles and 24 patents, IDT sets the standard in custom nucleic acid synthesis. Early in his research career, Dr Walder developed "antisense" technology, which became a critical tool for discovering the functions of many of the genes identified through the Human Genome Project. Beyond directing the company's expansive manufacturing operations, Dr Walder also oversees a world-class molecular biology research division that is a proven innovator of novel applications for DNA- and RNA-based compounds.

As The Custom Biology Company, striving to exceed customer expectations, IDT ensures that customers receive the same quality and service wherever they are in the world and from whichever manufacturing site their products are delivered. By providing personalized, streamlined, and consistent customer experience, delivering innovative products, and extending our unique culture globally, we endeavor to remain the strategic partner of choice for scientists worldwide.

WHAT IDT DOES

IDT sells short strands of DNA called oligonucleotides or oligos. In order to better understand how these are useful, one has to know a bit about DNA itself.

DNA is "the blueprint for life" and encodes instructions for all of life's processes. DNA is a complex long thin molecule (strand) that is made from 4 possible building blocks called "bases". These bases are called adenine, cytosine, guanine and thymine, often represented by A, C, G, and T, respectively. The precise order of these bases is a code for information. In living organisms, DNA strands can be millions of bases long and therefore contain huge amounts of information. This complexity is responsible for the vast diversity of life on earth. Read more>
COMPANY OVERVIEW

4 Manufacturing Operations

44,000 Oligos Per Day

780 Employees Worldwide

>3% Top line revenue donated to charity

ISO 14001
Coralville, Iowa Facility

82,000 Global Customers

35% Women In Management

3 Consecutive Years Earning Top Places to Work Award
ENABLING DISCOVERY IN BIOLOGY AND MEDICINE

We produce custom nucleic acids, which are necessary tools for all molecular biology applications. Our products are critical to research done in many important fields of the life sciences, including health care, agriculture, ecology, and biodiversity. DNA is the basis of all life on earth, and the tools to study and manipulate DNA are fundamental to understanding and protecting our living world.

NEW DRUGS AND GENETIC MEDICINES

Nearly all modern drug discovery at some point involves studying the effects of new compounds on the presence of genes, defining how the drugs work in the body, and determining their safety. These steps are necessary to ensure that new drugs are as potent and as safe as possible. Advances in genome sequencing allow scientists to more accurately identify genetic errors that cause disease. Therefore, new gene-targeting drugs are under development, where the drug itself is a synthetic nucleic acid. IDT products are crucial to the research being performed in these areas and, while we do not develop new drugs ourselves, our scientists are actively involved in developing new reagents and technologies to advance these discoveries.

THE NEXT GENERATION OF MEDICAL DIAGNOSTICS

Historically, most medical diagnoses relied on biochemical assays that were often slow or not specific to the disease. A new generation of nucleic acid–based medical diagnostics is emerging which enables quick, easy, and more specific analysis, so doctors obtain better answers faster. This technology is having an immense impact on most fields of medicine, from diagnosing infectious diseases to identifying cancers. For example, identifying infections often took days using bacterial cultures, but new DNA-based assays can be completed in just a few hours and will often provide information about antibiotic resistance at the same time. Our ISO 13485 certified GMP unit allows us to manufacture critical nucleic acid components for FDA approved medical diagnostic kits.

BIOFUELS AND A CLEANER ENVIRONMENT

Breakthroughs in the development of biofuels depend on engineering new enzyme systems to convert waste biological material into a useable energy resource. IDT is helping to accelerate the discovery process by providing synthetic genes to companies working to produce clean, renewable energy.

BUILDING A BETTER FOOD SUPPLY

The cornerstone of modern agricultural science is development of improved traits in both animal husbandry and plant crops through cross-breeding. It is important for agricultural scientists to be able to analyze a large number of samples and track the genes responsible for conferring desired traits quickly, accurately, and cost effectively. The major seed companies and agricultural research institutions use IDT nucleic acid products for fast, accurate genetic analysis.

NOT JUST FOR HUMANS

While biomedical research probably is the largest use for IDT products, genetic analysis is central to all areas of biology. Universities, major zoos, and focused biodiversity projects use our synthetic nucleic acids to catalog and study the genetics of all types of living organisms, from insects to cheetahs, bacteria to shrimp, and fungi to giant redwoods.
We are proud to release IDT’s first sustainability report, which uses 2013 as the baseline reporting year. This year, and annually hereafter, we will disclose our environmental, social and governance (ESG) performance to our current and prospective customers, employees, and business partners, so you will know how we are performing on issues that matter to you. We have developed a standardized ESG performance chart that makes it simple to compare our ESG performance year to year.

Sustainability has been at the heart of IDT throughout our nearly 30-year history. Guided by an uncompromising approach to product quality, a belief in the value of customer service, and a determination to minimize costs, we have developed manufacturing methods that have resulted in a 10-fold decrease in the price of our custom oligos over the last five years. We have achieved this by building machines that use smaller reagent volumes, reduce waste, and result in a lower environmental impact.

With IDT’s expansion into Europe and Asia-Pacific, new questions and concerns from our customers arose with the transition to global status. Some of our customers have enquired about our corporate sustainability performance, and we have received and responded to large procurement requests for information about our sustainability practices.

We decided to address these issues holistically. We formed a cross-functional sustainability steering committee to conduct a materiality assessment of our organization that included the perspectives of our most important stakeholders. Corporate functions represented on the steering committee include Environmental, Health, and Safety (EHS), Facilities, Information Systems (IS), Human Resources (HR), Supply Chain and Procurement, Research and Development, Customer Service, Finance, and Legal.

The steering committee responded to the priority material issues by developing a strategy to address our stakeholders’ most important concerns. Below is a graphic presentation of our materiality assessment process and our sustainability strategy that developed from that process. (Next Page)
OUR SUSTAINABILITY STRATEGY

Our sustainability report follows our three stated goals. Each section provides context for our sustainability progress over 30 years, presents specific ESG performance metrics, and identifies current accomplishments and challenges looking ahead.

We took several important steps during 2013 to formalize our historical commitment to sustainability as a strategy for continued growth and innovation.

SUSTAINABILITY MATERIALITY ASSESSMENT

STEP 1: ALL COMPANIES
- IDT identified the most valued sustainability issues for all companies from the viewpoints of financial, investor, and business stakeholders.
- IDT benchmarked its highest ranking corporate peers on ESG performance.

STEP 2: INDUSTRY SPECIFIC
- IDT reviewed industry-specific standards and certifications to determine their application to the company.
- IDT benchmarked its closest competitors on ESG performance.

STEP 3: IDT SPECIFIC
- IDT ranked and prioritized material issues from Steps 1 and 2, and then integrated them into an analysis of material issues specific to IDT, from primary stakeholders’ perspective.
- IDT incorporated top-ranking issues into its baseline CSR strategy for 2013.
EVERY CUSTOMER EXPERIENCE WILL BE PERSONALIZED, CONSISTENT, AND STREAMLINED
STREAMLINED CUSTOMER EXPERIENCE

CUSTOMER AND TECHNICAL SERVICES

PERSONALIZED SERVICE

Dr. Walder recognized early on the critical importance of always having a live voice at the other end of the phone when seeking customer support. This vision was pivotal to building the strong foundation from which our customer service strategy has evolved. IDT now offers multiple channels for personalized customer interaction—phone, email, web chat, and social media. Our global expansion allows us to provide multilingual support and accessible business hours throughout North America, Europe, and Asia-Pacific.

CONSISTENT SERVICE

In 2013, a cross-functional Customer Experience (CX) Steering Committee was formed to drive the goal of ensuring that every customer experience is personalized, consistent, and streamlined. Our customer and technical services (CATS), sales and marketing, and information systems (IS) departments are working together to identify, prioritize, and implement projects that should positively impact our customers’ overall experience.

Within IDT, the customer services function is formally identified as Customer and Technical Services (CATS) in Coralville, Leuven, and Singapore, and analogous departments in the Synthetic Biology, Good Manufacturing Practices (GMP), and Third Party Manufacturing and Integrations (TPMi) business units. CATS staff are responsible for providing support to customers before, during, and after any ordering event.
STREAMLINED CUSTOMER EXPERIENCE

THE IDT DIFFERENCE

PERSONALIZED INTERACTIONS

Customer and technical support staff do not use scripted text. Almost every product shipped by IDT is manufactured to a customer’s exact specifications. As every product is custom, there is a greater need for individualized support.

MINIMAL WAIT TIMES

Phone calls and web chats are answered quickly, with customers always reaching a person, not an automated service.

KNOWLEDGEABLE STAFF

We have fully trained technical and applications support staff in all locations. Every customer support person is capable of assisting customers with queries about the entire range of IDT products, reducing the need for repeat calls, transfers, and call backs. The CATS group strives to proactively educate our customers and engage in collaborative troubleshooting to help them achieve their results.

DEDICATION TO EXPERTISE

Technical support staff learn what is necessary to provide expert advice for all customer applications, regardless of manufacturer or platform, and have been given the authority to resolve all customer issues. Additionally, senior research staff are always available to offer technical support to our customers globally.

POSITIVE LEARNING ENVIRONMENT

Employee professional development and technical skills training are encouraged and facilitated.
2013 HIGHLIGHTS

- We established the Customer Experience Steering Committee (CX) to identify, prioritize, and implement changes to ensure that every customer interaction is streamlined, personalized, and consistent.

- We strengthened our internal processes for handling customer interactions, streamlined the order entry process, and enhanced efficiency to help eliminate errors in customer orders.

- We created a knowledge database, accessible to customer and technical support employees at all our sites, in order to deliver faster, more accurate responses to customers to keep their research moving.

- We implemented regional support for customers in the Asia-Pacific region.

LOOKING AHEAD

- We will extend the IDT customer service model into Japan, providing the same customer experience to our customers in Japan, with local language support and faster delivery times.

- We will implement metrics identified by the CX committee to improve the customer experience.

- We will establish formal guiding principles and protocols that will form the basis for providing enhanced, streamlined customer support.
INFORMATION SYSTEMS

Our information systems (IS) department provides creative solutions that harness expertise in hardware, software, and process analysis and design to support the growth and financial success of IDT. The IS department develops most of the software that processes customer orders and enables our manufacturing and shipping automation, and provides the tools that facilitate customer interactions with IDT. Every customer order that is received by IDT is unique. Custom in-house developed software manages the manufacturing equipment to control the consistency and precision of the manufacturing process. Additionally, software designed in the IS department allows the progress of the 44,000 oligos we ship per day to be continually monitored throughout the process, from order entry to shipping.

THE IDT DIFFERENCE

ALL PRODUCT DOCUMENTATION PROVIDED ONLINE

Quality control data, specification sheets, custom reports, and other product documents are freely available to customers through the IDT website.

UNIQUE CUSTOMIZATION CAPABILITIES

We provide our customers with the unique ability to specify custom labels and documents that can quickly and seamlessly be incorporated into the manufacturing process.

FREE ONLINE ANALYSIS TOOLS

We develop and provide free, sophisticated online oligonucleotide analysis tools for researchers to use without having to register on our website and with no obligation to purchase from IDT.

LOOKING AHEAD

- We will increase the rate at which IDT deploys new products, services, and capabilities globally by continually assessing and streamlining processes.
- We will apply power management policies, selecting vendors with products that meet our sustainability goals and employ modern EnergySmart™ processors in our servers. Our vendor selection will include requirements for compliance with IEEE 1547, LEED, and NABERS.

The entire IS team works to ensure a consistent, streamlined service.
MARKETING AND USER EXPERIENCE

The User Experience (UX) team at IDT, which is part of the marketing department, drives marketing activities through focus on:

- Increasing demand for IDT products and services by employing consistent, efficient, and targeted multi-channel branding and marketing communications;
- Improving customer satisfaction and loyalty by implementing UX practices and capabilities; and
- Increasing product line revenue through sales support.

The UX team uses a wide range of tools to interact and communicate with IDT customers and quickly design and validate solutions to meet customer needs and exceed their expectations.

2013 HIGHLIGHTS

- Provided our international customers with a more personalized web experience that includes region-specific ordering and support material
- Engaged our customers with targeted, event-driven email marketing that provides a measurable communication channel
- Conducted a customer journey workshop to improve our collective understanding of the people we serve
- Created a customer experience feedback team to guide new development and ensure that our efforts align with customer interests

LOOKING AHEAD

- We will continue to improve our customer experience by working with the information systems and customer care teams to enhance the usefulness and usability of our website
- We will deploy a web development strategy to improve interactions across a wider range of electronic devices
- We will continue to engage our customers and incorporate their feedback into our web design processes
STREAMLINED CUSTOMER EXPERIENCE

OUR GROWING BUSINESS

IDT has expanded to truly become a global company in order to deliver our exceptional customer experience worldwide.
INTEGRATED DNA TECHNOLOGIES PTE. LTD. (PTE)

IDT acquired the oligonucleotide business of 1st Base Pte. Ltd., its Singapore distributor, in February 2012. This facility became fully operational as Integrated DNA Technologies Pte. Ltd. on April 1, 2013, with the primary objective of expanding into the fast-growing Asia-Pacific market. From an initial staff of 32, the site now has 40 employees, comprising sales, customer care, manufacturing, finance, and IT professionals. In 2013, PTE’s top line revenue grew by 36% and the number of oligos manufactured daily at PTE increased by 170%. PTE serves 16 countries through direct sales and distributors.

2013 HIGHLIGHTS

- Successfully integrated instruments, processes, policies, and products without the loss of a single customer by actively communicating anticipated changes
- Established a team of customer care professionals that speaks nine languages to better serve regional customers
- Implemented operational procedures that enable next-day delivery for regional customers who submit oligo orders by 11 am Singapore time
- Optimized manufacturing activities to enable IDT to become the fastest oligo manufacturer in Singapore and provide same-day delivery to local customers
- Provided enhanced distributor service, including marketing, shipping, and technical support, to streamline their customers’ experience and promote growth of up to 60% within 9 months
- Provided training as well as regular, accurate, and timely updates to distributors, enabling them to provide a consistent experience for their customers and build trust and brand loyalty
INTEGRATED DNA TECHNOLOGIES BVBA (IDT BVBA)

Integrated DNA Technologies began operations in Leuven, Belgium, in 2006 in order to improve service to its European customers. IDT’s European headquarters was formally established as IDT BVBA in September 2008, and now has 65 employees from an initial staff of 6. Since the grand opening, IDT BVBA has experienced impressive growth.

IDT BVBA is the first commercial supplier worldwide of large-scale RNA oligos for in vivo applications.

2013 HIGHLIGHTS

- EBITDA was doubled over the previous year.
- Daily manufacturing was increased from approximately 100 core oligos in 2008 to 6000 core oligos on a regular basis in 2013.
- Large scale standard oligo turnaround time reduced from 20 weeks in 2008 to 10 business days in 2013.

While accomplishing these impressive growth figures, IDT BVBA has aimed to extend throughout Europe the exceptional customer service that has been the hallmark of IDT for the past quarter of a century:

- The European customer and technical services team accommodates customers in 9 different languages: Danish, Dutch, English, French, German, Norwegian, Romanian, Spanish, and Swedish.
- IDT BVBA supports product requests from 145 countries throughout Europe, Africa, the Middle East, and Asia. The customer and technical support team collaborates with our European, Asian, and US sales teams to support customers directly, or through IDT’s international distributors, across this vast geographic territory.
- The standard level of service for core products is “Order Today, Ship Tomorrow”.

LOOKING AHEAD

- We will continue to reduce turnaround time for all large scale oligos, including all custom, boutique-like oligos, so that all products ship within 10 business days.
- We will expand the existing manufacturing site by the end of 2014 to accommodate intensive growth.
- We will achieve ISO13485 certification, adding IDT’s European headquarters to the global map of large scale GMP manufacturing producers.
- We will enhance customer service by conducting business in 7 local currencies.
INTEGRATED DNA TECHNOLOGIES, INC: SAN DIEGO OPERATIONS

The San Diego Manufacturing Facility opened December 2005, following the purchase of Genbase, Inc. This was the first satellite manufacturing facility for IDT and became the model for future expansion in Europe and Asia. The San Diego facility is strictly a manufacturing operation with the primary goal of decreasing turnaround time to our customers on the west coast of the US. We established a next-day courier delivery service that became the blueprint for the establishment of courier zones for the Coralville, Leuven, and Singapore facilities. The San Diego facility has grown from an initial 15 employees, producing 1000 oligonucleotides per day, to 28 employees, producing more than 4500 oligonucleotides per day.

RECENT ACCOMPLISHMENTS OF THE SAN DIEGO FACILITY

- Established next-day delivery service to San Diego, San Francisco, Seattle, Los Angeles/Orange County, and Houston
- In 2012, relocated manufacturing operations to add 70% more square footage for current and future operational needs
- Expanded HPLC capacity to service the next-day courier zone, decreasing turnaround time for these products
- Expanded plate-based product offerings for strategic customers, decreasing turnaround time
- Increased our production and analytical capacity to meet the increased demands of our customers

LOOKING AHEAD

We will further expand the facility in 2014 by increasing manufacturing, shipping, and warehousing space.
INTEGRATED DNA TECHNOLOGIES EXECUTIVE OFFICE IN SKOKIE, IL

The financial and administrative offices of IDT have been based in Skokie, IL, since 1994. Informally referred to as “Skokie”, these offices provide the full range of financial services for the company, including payroll, consolidated financial reporting, collections, and tax and accounting services. Many of IDT’s executive and financial officers as well as IDT’s Asia-Pacific sales group are based in Skokie, which currently has 50 employees. Consistent with the company’s objective of giving back to the communities where it operates, the Skokie office provides space for non-profit organizations. One of these organizations caters to handicapped adults, whom IDT engages in appropriate company activities.

Staff at the Skokie offices attend the launch of IDT Core Values.
DISRUPTING THE MARKET WITH PRODUCT VALUE AND INNOVATION
PRODUCT DEVELOPMENT STRATEGY

IDT has always been guided by an uncompromising approach to quality, a drive to exceed customer expectations for good service, and a commitment to minimize consumer costs. Executing on these goals has helped IDT to become the largest supplier of synthetic DNA and RNA (nucleic acid) products in the world.

We have developed synthesis methods that result in the leading manufacturing efficiency for nucleic acids. We have pioneered methods for assessing nucleic acid identity and purity. These capabilities allow us to deliver the highest quality custom oligonucleotide products in the industry. Further, due to IDT in-house development of high throughput synthesizers, customers have experienced a greater than 20-fold price reduction for custom oligonucleotides over a 20-year period, enabling more research.

Our product value extends beyond the quality and pricing of these custom sequences. Customers choose IDT because we have the unique capability to fulfill requests for complex or unusual nucleic acid sequences. We incorporate our scientific expertise into the development and improvement of manufacturing methods, create product design tools that are made freely available online, and provide expert technical guidance through our customer and technical support (CATS) department. Our systems and support services are set up to provide customers transparency in product design and order fulfillment.
IDT'S CORE BUSINESS IS DRIVING NEW PRODUCT LINES

While our customers recognize IDT as an efficient, reliable oligonucleotide manufacturer, many are not aware how uniquely positioned IDT is within its industry. Crucial to IDT’s success has been its outstanding team of engineers who have enhanced the company’s synthesis techniques by vertically integrating all key manufacturing processes, as well as designing and building its proprietary, world-class DNA synthesizers.

Commercially available DNA synthesizers simply cannot accommodate the constant use necessary to fulfill IDT’s round-the-clock manufacturing needs. For decades, IDT’s talented engineers have designed and built machines that handle these demanding requirements. It is these patented machines that have helped make IDT the world leader in nucleic acid synthesis that it is today, with unparalleled design for efficient use of reagents, improved product accuracy, and reduced waste, all while ensuring delivery of the highest quality products at remarkably competitive prices.

Not only is each of the 44,000 sequences ordered daily a unique product, personalized to the scientist’s research, but each can also require a breadth of modifications and purification options, further diversifying our core product offerings.

IDT scientists, through extensive research and development, are continuously expanding our core competencies into novel product applications and new product lines. As an example, our development of a variety of chemicals, such as the ZEN™ molecule and Iowa Black® dye, which can be used to modify DNA and RNA, enables an even wider range of applications. The ZEN™ molecule is incorporated into IDT PrimeTime® qPCR products to deliver higher quality data than competitor products. The ZEN™ molecule is also used in IDT miRNA Inhibitors, allowing scientists to introduce them into mammalian cells with high potency, but low toxicity.

Representative technical advancements such as these allow us to provide high quality nucleic acid custom products with the widest range of modifications, quickly and at reasonable cost—the hallmarks of IDT’s core business.
“We use IDT primers for our PCR work. Since our protocols are mostly focused on high throughput batch processing, quality and consistency of all components are critical. Even though we validate the primers prior to any large scale analysis, if a primer starts degrading, it will compromise a lot of data—that’s a lot of rework, resulting in additional time and money wasted. We’ve been very happy so far, and while we always keep a list of backup suppliers as standard practice, the IDT primers have shown great consistency in meeting our expectations.”

—Dr Evgeny Zakharov, Director, Canadian Centre for DNA Barcoding, University of Guelph (Ontario, Canada) in DECODED 2(3), JULY 2012

The development of our landmark Ultramer® synthesis platform allows IDT to manufacture the longest oligonucleotides available on the market. This ability to synthesize long oligos has facilitated groundbreaking products such as gBlocks® Gene Fragments and individually synthesized xGen® products for next generation sequencing.
PRODUCT DEVELOPMENT

2013 Market Disrupters

Several products released in 2013 exemplify the value and innovation of IDT’s product portfolio.

**gBlocks® Gene Fragments**, the first commercially available sequence-verified, double-stranded, long oligonucleotides, proved a major milestone for synthetic biology. Scientists use these innovative gene fragments to more quickly and efficiently construct genes for use in applications ranging from developing therapeutic antibodies for treating cancer and inflammatory disease to producing renewable alternatives to petroleum-based products. Before the introduction of gBlocks® Gene Fragments, gene construction performed in-house by researchers was time consuming and error prone, and outsourcing to specialized vendors was expensive. gBlocks® Gene Fragments disrupted the gene synthesis market by essentially changing the paradigm for gene construction, allowing researchers to easily and quickly assemble genes for the lower price of long oligonucleotides.

In partnership with SGI-DNA, Inc., we continued to develop this innovative technology, extending the length and complexity of these fragments, broadening their use for even more applications. IDT has since developed a method for faster quality control and sequence verification, enabling us to reduce the cost of manufacturing and pass this value on to our customers. At the end of 2013, we made gBlocks® Gene Fragments available as libraries of sequences that contain distinct degenerate bases. This product facilitates studies requiring recombinant antibody generation and protein engineering.

The revolutionary technology, CAS9 technology, is now being used for a variety of applications in life science, agricultural, medical, and biofuels research.

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Dr Walder (right), President and CEO of IDT, and Dr Craig Venter, Co-Founder of SGI-DNA, agree to collaborate in the manufacture of longer Genes products.
The IDT proprietary Ultramer® synthesis pipeline, which enables us to manufacture the longest oligonucleotides in the industry, forms the basis for our xGen® next generation sequencing (NGS) products. Our target capture product, xGen® Lockdown® Probes, has been highly acclaimed by major global sequencing centers and researchers who are developing tests for clinical screening and diagnostics. Even though there has been a rapid decline in the cost of NGS in recent years, it is still beyond the reach of many laboratories, especially those in academic institutions. xGen® products are used to produce large amounts of DNA from specific parts of a genome, so that only those amplified areas are sequenced. This allows researchers to focus only on regions of interest to their research, thereby improving on the amount and quality of data obtained, while dramatically lowering costs. xGen® Lockdown® Probes provide our customers with high quality sequencing results at a reduced cost per sample.

“We continue to surprise ourselves with how well the IDT probes perform, even across regions that historically performed very poorly….In such cases we always observe even and reproducible representation of those regions when we use the IDT probes for capture.”

—Dr Elaine Mardis, Co-Director, Human Genome Institute, Washington University (St Louis, MO, USA) in DECODED 3(1), January 2013
The scientific research and development group is comprised of 25 scientists divided into three subgroups that focus on basic research, product development, and new product validation. Since the company was founded, IDT scientists have been authors on more than 125 peer-reviewed scientific publications and inventors on more than 30 issued US patents, with additional patent applications pending.

2013 HIGHLIGHTS

- Development of chemically modified, potent synthetic oligonucleotides that are stable in mammalian cells and are currently being investigated as therapeutics by researchers around the world. The first of these products was introduced in January 2014 as IDT miRNA Inhibitors.
- Improvement of synthesis and assembly methods enabled doubling of the length of our groundbreaking product, gBlocks® Gene Fragments, from 500 base pairs (bp) to 1000 bp, while offering a 25% price drop.
- Development of a new “artificial intelligence”-based design tool that will allow researchers to more quickly and easily identify high potency reagents that regulate gene expression in mammalian cells.
- Identification of lead compounds for a new oligonucleotide-based therapeutic that Dicerna Pharmaceuticals plans to take into human clinical trials as a treatment for liver cancer in late 2014 or early 2015.
- Development of xGen® Lockdown® Probes and xGen® Blocking Oligos, improved reagents for target capture that allow focused next generation sequencing (NGS) and which provide lower cost and improved quality of sequencing.
- Characterization of a new family of DNA polymerase mutants that improve performance of nucleic acid–based diagnostics and which can be combined with IDT’s proprietary RNase H polymerase chain reaction (rhPCR) amplification method to improve the accuracy of genotyping and detect the presence of rare mutations that occur at levels of only 1 in 10,000 (or lower) in a DNA sample.
RESEARCH COLLABORATIONS

Our active and dedicated research team is current with the latest technology and engages in collaborative research with over a dozen academic institutions around the world. The research team assists local scientists by providing access to the latest DNA and RNA technologies, thereby accelerating the pace of their work and enabling progress which might not otherwise be possible. Some examples include:

**The University of Iowa**

In collaboration with researchers at the University of Iowa, we are working to better understand cellular control of the gene responsible for cystic fibrosis and, together, have uncovered a previously unknown regulatory pathway that opens the possibility for entirely new treatment approaches for this fatal genetic disorder.

**The City of Hope**

We are working with researchers at the City of Hope cancer research hospital (Duarte, CA, USA) on novel methods to turn off expression of specific human genes, using custom designed synthetic oligonucleotides (the primary products manufactured by IDT). As a direct extension of this project, we have been collaborating with Dicerna Pharmaceuticals, who licensed this exciting new technology, to turn this idea into new therapies, with a focus on cancer and metabolic diseases of the liver.

**Tel Aviv University**

We are collaborating with researchers at Tel Aviv University to better understand the genes that are responsible for certain forms of blood cancer, and have recently identified a particular gene in mantle cell lymphoma that may be a suitable target for new anti-cancer therapies.
IDT bioinformatics efforts began with a single vision: that no scientist using DNA or RNA for research should regard IDT tools and design engines as anything less than a required professional resource. That vision persists and evolves today.

BIOINFORMATICS SUPPORT OF RESEARCH OPERATIONS

Within the Synthetic Biology business unit, bioinformaticians set parameters that guide synthesis and assembly of double-stranded DNA, assist with process troubleshooting, and provide analytics support to yield high quality products.

Bioinformaticians within the next generation sequencing (NGS) group provide expert data analysis support to reduce the turnaround time for research and development, and create analysis and visual diagrams of data from the sequencing instruments. The visual representations of the data help the product development group determine future experiments.

The scientific computing team integrates IDT research and scientific expertise into freely available, online analysis tools that aid IDT customers with experimental design.

BIOINFORMATICS AND SCIENTIFIC COMPUTING

The scientific computing (bioinformatics) team is passionate about providing extremely sophisticated yet practical analytical tools for laboratory scientists. These free, online analysis programs are accessed over 107,000 times a month and are indispensable tools in molecular research laboratories worldwide. As an example, calculations derived from IDT cutting edge thermodynamic research have been incorporated into the well-known OligoAnalyzer® program and PrimeTime® and PrimerQuest® assay design engines. As part of our vertical integration, bioinformatics team members work closely with production, product development, and research operations to provide data analysis as well as streamline the customer experience on our website.
CORE BUSINESS EXTENSION UNITS

IDT has been investing heavily in the expansion of our services from the original core business of basic oligonucleotide manufacture. We have established exceptional purification capabilities, continue to introduce new high throughput processes, and developed the unique Ultramer® synthesis platform, which allows us to produce high quality, extremely long oligonucleotides. These competencies have supported the formation of extension business units that will help fuel IDT’s growth for the next decade as we achieve our aim of globalizing the core business.

SYNTHETIC BIOLOGY GROUP

The Synthetic Biology business unit has augmented its traditional gene synthesis products (Ultramer® Oligonucleotides, and MiniGene and Gene constructs) with the introduction of sequence-verified, double-stranded DNA molecules that provide researchers with a cost and time advantage for the design and construction of a variety of biological devices and systems.

- Introduced the landmark 500 base pair (bp) gBlocks® Gene Fragments, which allow quick and easy gene construction, for the price of long oligonucleotides.
- Improvements to internal synthesis processes and product quality assessment throughout 2013 led to faster delivery times, lower cost, and longer (750 bp) gBlocks® Gene Fragments.
- At the end of 2013, gBlocks® Gene Fragments were made available as libraries of sequences that contain distinct degenerate bases. This product facilitates studies requiring recombinant antibody generation and protein engineering.

LOOKING AHEAD

- We will continue to extend the flexibility of gBlocks® Gene Fragments. Building on our theme of “Cheaper, Faster, Better”, we will produce longer gBlocks® Gene Fragments with high sequence fidelity, fast delivery times, and competitive pricing.
- We will expand the applications for which gBlocks® Gene Fragments can be used, specifically targeting current groundbreaking technologies.
GOOD MANUFACTURING PRACTICES (GMP) UNIT

Through the GMP unit, IDT combines innovative research and development and open-source licensing to provide the diagnostics industry with license-free access to a variety of patented reagents that are vital to developing affordable diagnostics.

- In 2007, IDT was the first multinational, full-service oligonucleotide manufacturing company to launch an ISO 13485:2003 certified unit, capable of supplying to diagnostics manufacturers.
- The GMP unit has expanded from a small division of the company into a business unit with $10M in annualized sales to diagnostics device manufacturers on 4 continents.
- IDT is the only diagnostics-approved oligonucleotide manufacturer to offer online ordering, enabling an unparalleled combination of speed and price efficiency.
- In 2014 we will increase our capacity for providing GMP products and ensure multinational capability by obtaining ISO13485: 2003 certification for the Leuven, Belgium facility.
THIRD PARTY MANUFACTURING AND INTEGRATIONS GROUP

The Third Party Manufacturing and Integrations (TPMi) business unit focuses on business-to-business (B2B) systems integration and private-label OEM products.

- Building on IDT’s extensive custom manufacturing, formulation, kitting, and logistics capabilities, the TPMi unit offers private-label OEM services to a growing number of biotech companies. Outsourcing these functions to IDT allows our partners to focus on product design, sales, and marketing, knowing that through IDT they will be providing their customers with the highest quality research products.
- In 2012, IDT developed the capability to drop-ship OEM products, in our partners’ packaging, to their customers globally. This capability reduces both delivery time and costs for researchers around the world.
- IDT is the only oligo manufacturer to supply reagents to its partners throughout their entire product development cycle. Supplies include DNA, RNA, and other reagents for initial development, OEM products for research use only, and GMP products for development and manufacture of diagnostics devices. IDT is a reliable partner throughout the entire process.
- **More than 25%** of IDT’s revenue is processed through TPMi as B2B integration. IDT supports all major punch-out vendors, including Ariba and SciQuest.
- The TPMi unit provides custom web portals for university core labs, stockrooms, and international distributors. The IDT portals are equipped with extensive administration tools, reports, and shipping consolidations that reduce costs and delivery times.
PRODUCT VALUE AND INNOVATION

- **Price reduction of custom oligonucleotides over 20 years**: >20X
- **Number of companies that manufacture 44,000 oligos per day**: 1
- **Average monthly access of IDT online oligo analysis tools**: >107,000
- **B2B integrations contribution to IDT revenue**: >19%
- **Proportion of revenue from custom manufactured products**: >99.3%
- **R&D spend**: 6.3%
EXTENDING AND MAINTAINING OUR UNIQUE CULTURE GLOBALLY
EXTENDING OUR CULTURE GLOBALLY

HUMAN RESOURCES

At IDT we realize that although science may be uniform, people are unique. We strive to embrace the diverse personalities of our employees and the culture in all locations where we operate. To advance our mission of becoming The Global Custom Biology Company, we welcome those who share our passion for quality production and an excellent customer experience. Wherever we operate, we seek employees with excellent scientific and technical backgrounds while we aim to evoke the spirit of “kaizen”—change for the better and continuous improvement. To achieve our objectives, we provide ongoing employee training and encourage young scientists to pursue internships with us. Giving back to our local communities is a large part of the IDT culture. We promote environmental awareness within the company, encourage and sponsor community activities, and provide financial support for life sciences research at various levels.

At the heart of our HR initiatives are the IDT Core Values. Developed in 2012 in conjunction with senior management, our Core Values encapsulate our unique organizational culture and articulate the expectations that define how we perform our work, conduct ourselves, and collaborate with others. The core values direct how we interact with each other through our personal and business relationships, and they influence our decision making.

**ATTRACTING AND RETAINING TOP TALENT**

IDT’s consistent, rapid growth has necessitated a continually expanding workforce. We recognize that our success depends on identifying, developing, and retaining skilled and motivated employees. Our managers rely on the Core Values, throughout the selection process, to recruit not only for knowledge and skill, but also for talent and fit. Our mandate is to provide all of our managers worldwide with the tools they need to enhance employee engagement by attracting, retaining, and developing a highly skilled, high performing workforce. We pride ourselves on the tenure of our people, a true testament to the positive attributes of our workplace.

**ENCOURAGING EMPLOYEE PERSONAL DEVELOPMENT**

We recognize the need to improve our voluntary turnover rate of 8.6% and will broaden opportunities for all employees to grow within their positions while preparing them for promotion or other roles that suit their career objectives. We will introduce the Personal Development Planning (PDP) process to provide employees the tools for creating their own opportunities, which will enable us to continue to attract, develop, and retain high performing employees. We are committed to recognizing and building upon each individual’s unique strengths through opportunities of discovery and learning that benefit them personally and professionally.
EXTENDING OUR CULTURE GLOBALLY

2013 ACCOMPLISHMENTS

• #7 in the large company category for The Des Moines Register Top Workplaces— We have improved from #8 (large category; 2012) and #15 (mid-size category; 2011).

• #8 out of 240 companies in The Scientist Magazine: Best Place to Work in Industry survey— This annual survey compiles employee input; our strong and improved rank is an indication of increasing employee satisfaction. Previous ranks: #19 out of 177 (2012); #14 out of 196 (2011).

• 522 employee hours donated to Habitat for Humanity

LOOKING AHEAD

• Provide employee training based on the IDT Core Values

• Implement formal manager training program based on IDT Core Values

• Introduce personal development plans (PDP) across the company to encompass goal setting, accomplishments, training and development, and benchmarking against IDT Core Values

• Develop and enhance the orientation experience for new employees

IDT employees are enthusiastic about giving back to the communities in which we live and operate. Through corporate sponsored volunteering, employees are encouraged to use their special skills outside of the workplace. IDT provides flexible scheduling and paid volunteer days for company-sponsored events, which is an effective means of engaging with our local communities. Our employees feel good about where they work and the difference they make.
The IDT Wellness Committee organizes various activities throughout the year. In 2013, IDT donated $2,024 to two food banks in Coralville, IA, as part of the Pound for Pound Challenge, where the company provided a dollar per pound match for the total weight lost by employees during its annual wellness campaign.
EXTENDING OUR CULTURE GLOBALLY

ENVIRONMENT, HEALTH, AND SAFETY

REDUCING OUR GLOBAL FOOTPRINT

The Environmental, Health, and Safety (EHS) department at IDT supports and promotes the company’s core business strategy to operate in compliance with applicable laws, rules, regulations, and company policies, while working to reduce our global footprint by using natural resources efficiently.

SUSTAINABLE BUILDING FEATURES

IDT’s global manufacturing headquarters in Coralville, IA was designed and constructed with the environment in mind. Energy conservation features such as geothermal heating and cooling, solar shading, and rooftop monitors, were incorporated to reduce environmental impact and lower running costs. Other facility features include low volatile organic compound (VOC) interior finish choices and carpet and tile choices with high recycled content percentages.
Controlling the inevitable pollution from parking lot runoff was important to the facilities team at the Coralville site. After reviewing our options, bioswales were chosen as the best solution. Strategic placement of high-loam content soil and deep prairie grasses and other plants are strategically chosen to filter stormwater runoff, forcing slow percolation through the amended soil. An interesting required maintenance task is to simulate a prairie fire every 3 years to kill invasive species and to propagate the fire activated seeds. It takes 3–5 years to kill invasive species and to propagate the fire activated seeds. An interesting maintenance task is to simulate a prairie fire every 3 years to kill invasive species and to propagate the fire activated seeds.
The Facilities team places energy efficiency at the core of their job responsibilities. Talented heating, ventilation, and air conditioning (HVAC) staff allow us to realize continued improvements in energy efficiency and systems optimization. Current systems optimization projects we are undertaking at the Coralville facility include:

- Improving the site chiller system by incorporating the latest energy efficient configuration. This will allow us to eliminate six pumps and save the energy needed to run these pumps. Additionally, these new pump motors will be driven by variable speed drives (VSDs) that significantly reduce the amount of energy required by the motors for pumping. Currently, 85% of our qualifying pumps are controlled by VSDs.

- Continued expansion of the geo field heat pump system for laboratory temperature control fed by the 288 ton geothermal field that was installed in 2006. We are phasing out low efficiency boilers and installing more energy efficient geothermal systems.
EXTENDING OUR CULTURE GLOBALLY

ENVIRONMENTAL MANAGEMENT SYSTEM

In 2009, EHS at the Coralville facility began implementation of the company’s environmental management system (EMS), which received ISO 14001 certification in April 2012. In December 2013, the facility was recertified by a third party and no incidents of non-conformance were identified. The EMS, which is structured around IDT’s significant environmental issues, has already helped us achieve significant cost savings.

Environmental Aspects | Pre-2013 EMS Related Cost Savings
---|---
Carbon Footprint & Energy Consumption | $28,600 reduced electricity & natural gas
Hazardous Waste | $100,000 savings from reduced generation
Landfill Waste | 38.6 tons diverted

IDT Community Garden. The IDT community garden yielded over 5000 lbs of fresh produce. Approximately 1000 lbs of fresh vegetables were donated to Johnson County, IA free kitchens. We will double the size of the garden and community donation in 2014.
SAFEGUARDING EMPLOYEE HEALTH AND SAFETY

Safety Training. IDT’s spill response “Blue Team” is a globally-harmonized, multi-facility team that serves as a first response unit for chemical spills that could occur at our manufacturing facilities. The team is equipped with state-of-the-art personal protective equipment to ensure the safety of its members. The company’s investment in our global Blue Team is necessary for safeguarding the safety of our manufacturing employees and the stability of our operations worldwide.

2013 HIGHLIGHTS

- Based upon our materiality assessment, we decided to:
  1. Prepare environmental baselines for all of our manufacturing facilities; and
  2. Install EMS systems at our facilities in San Diego, CA, USA; Belgium; and Singapore.
- We added eight new members to the Blue Team, and more than 50 team members received updated training with spill response drills.
- There were no significant spills, accidents, or fatalities at any of our facilities.

LOOKING AHEAD

- In 2014, we will analyze our baseline data, including the carbon footprint for all of our facilities, and determine where material issues exist. We will then set new sustainability goals and objectives that drive IDT’s business values and growth strategy.
- We will deploy our environmental management system (EMS) globally and achieve ISO 14001 certification for all sites.
The purchasing department at IDT supports core business strategies by providing our four global manufacturing centers with raw materials, equipment, supplies, and services at required cost and quality levels in compliance with all applicable laws, regulations, and company policies. To achieve this, the purchasing team manages an annual budget in excess of $40M under strict ISO 9001 and 13485 operating standards. IDT’s purchasing department balances risk mitigation and improved cost position with its corporate sustainability strategy.

In 2013, the purchasing department added sustainability related content to the Supplier Information page of IDT’s central website, invoked sustainability requirements within the terms and conditions document for purchasing transactions, added sustainability questions to the Supplier Self-Audit Questionnaire, included a sustainability component for on-site vendor audits, and continues to seek out business partners who share its sustainability values and vision. The department also facilitated the addition of the recycling symbol to the company’s most utilized product shipping package (>750,000 units shipped annually), which is 100% recyclable.

Purchase of post-consumer recycled products, including Staples’ Source Link products, resulted in substantial resource savings.

- 7212.41 lb CO₂
- 33,106.95 GAL
- 22,536.76 lb
- 55,205,319.75 BTUs
- 15,719.05 kWh

**Equivalents of reduced greenhouse gas emissions**

**Water saved**

**Wood resources saved**

**Total energy saved**

**Energy equivalent to electricity saved**
EXTENDING OUR CULTURE GLOBALLY

2013 HIGHLIGHTS

• Sustainability compliance information was added to the IDT website to emphasize our adherence to:
  — The California Transparency in Supply Chain Act
  — Section 502 of the Dodd-Frank Act on Conflict Minerals

• The recycling symbol was added to our most frequently used product shipping package (>750,000 units shipped annually), which is 100% recyclable

• Post-consumer recycled products, including Staples’ Source Link product line, were purchased to increase resource savings

LOOKING AHEAD

• We will continue to emphasize the importance of implementing a collaborative sustainability program with our suppliers, which will directly benefit both parties.

With an average of 10 years of supply chain experience, each member of the procurement team provides an impressive combination of expertise and talent to the company. Our supply chain personnel play key roles within the product lifecycle. Staff members gather product requirements, determine sourcing options, manage inventory expectations, and dispose of slow-moving or obsolete products. With the deployment of Dynamics AX 2012, Microsoft’s flagship enterprise resource planning (ERP) software application, the procurement team now has the real-time information required to efficiently manage IDT’s materials.
CHARITABLE GIVING AND COMMUNITY INVOLVEMENT

One of the hallmarks of IDT since its inception is an exceptional commitment to charitable giving and dedication to educating the next generation. Our employees are extremely proud of the expansive role the company continues to play in the community at large. In 2013 we increased charitable giving to an impressive 3% of topline revenue. Additionally, IDT employees are encouraged to volunteer their time and talent to the communities in which we live. To that end, IDT provides two paid volunteer days for company-sponsored activities. This has become a very effective approach to engaging our employees in the communities where IDT operates its business.

ALIGNING SOCIAL RESPONSIBILITY WITH OUR BUSINESS MISSION

We recognize the need to more consistently align charitable giving and community involvement with our business mission—enabling scientific discovery—and we have already taken significant steps in this direction. It was at the University of Iowa that IDT’s founder and CEO, Dr. Joseph Walder, as a young medical school professor and researcher in the late 1970s, first developed innovative designs for new applications of synthetic DNA and RNA. Therefore, IDT has its roots in the University of Iowa, and over the past 27 years there have been numerous fruitful collaborations between the institutions.

$1M GIFT TO UNIVERSITY OF IOWA CHILDREN’S HOSPITAL

This year, IDT chose to give back to the University of Iowa by making a $1M gift to the University of Iowa Children’s Hospital, one of the nation’s premier pediatric healthcare facilities. Many children of our employees were born in this hospital, generating a powerful emotional connection between IDT’s significant gift and this critical Iowa City facility. Further employee engagement in relation to IDT’s gift will occur in the spring of 2014 when we deliver company-wide presentations about the new Neonatal Intensive Care Unit (NICU) and provide tours of the new facility to IDT employees.
EXTENDING OUR CULTURE GLOBALLY

EDUCATING THE NEXT GENERATION

SMART Boards, innovative and interactive whiteboards for use in classrooms, can now be found in every grammar school classroom in Iowa City, thanks to a generous commitment of $200,000 from IDT. IDT’s financial support contributes to enhancing and strengthening the quality of young children’s education in its local communities. In the Metro Chicago area, IDT funded new state-of-the-art science laboratories in three high schools.

ENGAGING AND EDUCATING OUR LOCAL COMMUNITIES

During the Iowa City Book Festival in fall 2013, IDT sponsored a truly memorable event featuring the grandchildren of Henrietta Lacks, whose cells (HeLa) were used for developing the polio vaccine, cloning, and gene mapping. HeLa cells are still the most widely used cultured cells in many areas of molecular biology research. The entire Iowa City community was engaged in reading Rebecca Skloot’s captivating book, “The Immortal Life of Henrietta Lacks”. As local experts in the field, IDT scientists were invited to lead a panel discussion and put the history of HeLa cells into perspective. The lay community gained greater appreciation for the way HeLa cells are used today and for the societal benefits of IDT’s products.

Poster advertising An Evening with the Lacks Family during the Iowa City Book Festival. This event, which attracted more than 500 people from the local community, was sponsored by IDT.
EXTENDING OUR CULTURE GLOBALLY

2013 HIGHLIGHTS

- Donated more than 3% of top-line sales to charitable organizations, an unparalleled level of philanthropic giving for a life sciences company our size
- Provided a gift of $1M to support the Neonatal Intensive Care Unit (NICU) at the new University of Iowa Children’s Hospital
- Donated $200,000 for installation of SMART Boards in all classrooms in the Iowa City Community School District
- Supported the International Genetically Engineered Machines (iGEM) organization’s global undergraduate science competition dedicated to collaboration in synthetic biology. IDT sponsored 70 teams by providing credit towards IDT products.
- Established The Irving M Klotz Research Award in Chemistry, a permanently endowed professorship at Northwestern University providing $15K per year to a professor
- Helped build three state-of-the-art science labs for high schools in the Metro Chicago area, used by many of the Skokie IDT families
- Supporting advanced investigative researchers appointed to faculty positions through the National Institute for Psychobiology in Israel (NIPI) with a Senior Investigator Grant Award for neuroscience research for a 3 year period
- Sponsoring the annual, highly competitive Jerusalem Science Contest for outstanding US and Canadian high school students—winner receives a full four-year scholarship to attend the Jerusalem College of Technology (JCT). IDT scientists enjoy interacting with these very talented students and preparing them for the competition.

LOOKING AHEAD

- We will create the IDT Foundation to better align our charitable giving with our business mission of enabling scientific discovery.
- We will work to further engage our employees in connection with our charitable giving projects.
- We will expand our community involvement at our global sites.
### OUR PROGRESS

#### ESG Metrics | Measurement Units | 2013
--- | --- | ---
1. **ENVIRONMENTAL**  
   1. Total CO$_2$e emissions (scope 1 and scope 2) | Tons CO$_2$e | 5,602 (Coralville)
   2. Total energy usage | GJoules | 25,841
   3. EMS certification # of facilities | 1 of 4 (Coralville)
   4. Significant spills | # | 0
   5. Volume of spills | Thousands of metric tons | 0
   6. Fines | # | 0
   7. Total water use | m$^3$ | 16,046
   8. Municipal usage | m$^3$ | 16,046
   9. Total hazardous waste | Thousands of metric tons | 262.5
   10. Recycling | Thousands of metric tons | 98.5
   11. Total waste | Thousands of metric tons | 636.5
   12. Fuel distilled from crude | GJoules | 200.6

2. **SOCIAL**
   13. Facilities | # | 5
   14. Countries | # | 3
   15. Employees | # | 777
   16. Employee turnover | % | 8.6
   17. Women in management | % | 35
   18. Employee safety training | Yes or no | Yes
   19. Lost time injury rate per 200,000 hr worked due to accidents or TRIR (US only) | % | 3.1%
   20. Fatalities | # | 0
   21. Safety committee | Yes or no | Yes
   22. Child & forced labor policy | Yes or no | Yes

#### PHILANTHROPY & COMMUNITY
   23. Cash grants | US $ | 3% of revenue

#### LEADERSHIP & GOVERNANCE
   24. Executive for CSR | Yes or no | Yes
   25. Sustainability committee | Yes or no | Yes
   26. Suppliers audited | # | 3
   27. R&D expenses | % of revenue | 6.3%
   28. Suppliers facilities audited | # | 2
   29. Anti-corruption policy | Yes or no | Yes
   30. FCPA policy | Yes or no | Yes
   31. Gift-giving policy | Yes or no | Yes
   32. Equal opportunity policy | Yes or no | Yes
   33. Social media policy | Yes or no | Yes
   34. Privacy policy | Yes or no | Yes