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Genentech 2008 Corporate Sustainability Report



PASCAL SORIOT CEO, GENENTECH

As a new member of the Genentech team, I am delighted to have had the opportunity to learn more about Genentech's environmental sustainability and occupational health and safety achievements, many of which are described in this report.

In last year's report, Art Levinson described how sustainability objectives are well aligned with Genentech's business principles of scientific and operational excellence, as well as its focus on long-term planning, execution, people and culture. It is clear that not only are Genentech's employees committed to helping patients through great science and innovation, but they are also passionate about protecting the environment and the health and well-being of their colleagues. The grassroots efforts of people from across the organization to achieve these goals, with support from Art and others on the senior management team, have helped to make Genentech a special company.

Energy and water efficiencies provide the focus for our current environmental sustainability goals, as we are a company with much of our footprint in California, a state that in 2008 saw significant developments in climate change legislation and increasing concerns about water resources. As a result of employees driving efficiencies in their operations at our existing facilities and our engineering design team integrating green design principles into our new facilities, we are well on track to meet our 2010 sustainability goals. In the area of health and safety, benchmarking indicates that we compare favorably against our peers on key safety indicators.

Accurate and transparent reporting of greenhouse gas emissions is important to Genentech. We participated in the Carbon Disclosure Project in 2008 for the second year, and once again, we achieved the highest score in the biotechnology group. By the time this report is published, our 2008 greenhouse gas emissions will be reported to the California Climate Action Registry and audited by a third party. In March 2009, Genentech became a wholly owned member of our previous majority shareholder, the Roche Group. There is a shared passion for patients and great science between the employees of Genentech and Roche, and there is also a shared sense of environmental, health and safety responsibility. Following its belief that sustainable policies and practices lead to long term corporate value and innovation, Roche's achievements have included a listing on the Dow Jones Sustainability Index for five consecutive years. I am very pleased that Genentech was also selected for inclusion on this index in 2008, one of the many indicators of a strong alignment around the value of sustainable business practices between the two organizations.

The combined Genentech and Roche organization will create opportunities for knowledge sharing in all aspects of our business, and sustainability will be no exception. I am confident that great things will come from our talented employees, as they collaborate to address sustainability challenges and opportunities. Looking ahead to the remainder of 2009, we will investigate new goals to help Genentech drive further improvements in sustainability performance beyond 2010, the target year for our current goals. I look forward to supporting these efforts alongside other Genentech leaders, and to conveying our progress in future reports.

As a Genentech employee, patient, local community member or other stakeholder in our business, I hope that you find Genentech's fourth Corporate Sustainability Report informative and useful. Your comments are of importance to us, and I welcome your feedback.

Pascal

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INTRODUCTION

OUR REPORT

In Genentech's fourth Sustainability Report, we describe our performance for 2008 with regard to environmental sustainability and employee health, safety and wellness. We discuss how we are progressing against our 2010 sustainability goals and our plans for future improvements.

The scope of this report has expanded from our 2007 report to include data from three new Genentech facilities in Kentucky, Oregon and Singapore. Descriptions of these facilities can be found in the section titled "Our Locations." This year we have included an index, starting on page 28, that is based on the Global Reporting Initiative framework, and directs readers to information about our sustainability performance and programs in other areas than Environment, Health and Safety (EHS).

This report has been verified by Bureau Veritas Certification. Their verification opinion can be found on page 32.

We use a web-based system for collecting feedback about our sustainability efforts that can be accessed by visiting www.gene.com, clicking on "About Us" and then "Sustainability." We look forward to your comments.

OUR COMPANY

Founded more than 30 years ago, Genentech is a leading biotechnology company that discovers, develops, manufactures and commercializes medicines to treat patients with serious or life-threatening medical conditions. The company, a wholly-owned member of the Roche Group, has headquarters in South San Francisco, California.



OUR PRODUCTS

Genentech's goal is to deliver innovative medicines to patients with serious or life-threatening medical conditions. Since its founding in 1976, the company has focused its drug discovery efforts on therapies that would fill unmet needs. Today, Genentech manufactures and commercializes multiple biotherapeutics for critical medical conditions in the areas of oncology, immunology, and disorders of tissue growth and repair — giving Genentech one of the leading product portfolios in the biotech industry.

This table shows the medicines that Genentech manufactures and describes the diseases for which each is approved. For the latest information about Genentech products, go to www.gene.com, click on "Medicines" then "Product Information."

Activase [®] (alteplase)	A tissue plasminogen activator (or t-PA) approved for the treatment of acute myocardial infarction (heart attack), acute ischemic stroke and acute massive pulmonary embolism.
Avastin [®] (bevacizumab)	An anti-VEGF humanized antibody approved for use in combination with chemotherapy for the first or second-line treatment of patients with metastatic colorectal cancer. Avastin is also approved in combination with chemotherapy for the first-line treatment of patients with metastatic nonsquamous non-small cell lung cancer and in combination with paclitaxel chemotherapy in first-line metastatic HER2-negative breast cancer. The effectiveness of Avastin in metastatic breast cancer is based on an improvement in progression-free survival. Avastin is not indicated for patients with breast cancer that has progressed following anthracycline and taxane chemotherapy administered for metastatic disease. Currently, no data are available that demonstrate an improvement in disease-related symptoms or increased survival with Avastin in breast cancer.
Cathflo [®] Activase [®] (alteplase)	A t-PA approved for the restoration of function to central venous access devices as assessed by the ability to withdraw blood.
Herceptin [®] (Trastuzumab)	A humanized anti-HER2 antibody approved for the adjuvant treatment of HER2-positive, node-negative or node-positive (ER/PR negative or with one high-risk factor) breast cancer in combination with several chemotherapy regimens or as a single agent following chemotherapy. Herceptin is also approved for the treatment of first-line metastatic HER2-positive breast cancer with paclitaxel or as a single agent after one or more chemotherapy regimens.
Lucentis [®] (ranibizumab injection)	An anti-VEGF antibody fragment approved for the treatment of neovascular (wet) age-related macular degeneration.
Nutropin [®] (somatropin [rDNA origin] for injection) and Nutropin AQ [®]	Growth hormone products approved for the long-term treatment of growth failure due to a lack of adequate endogenous growth hormone (GH) secretion; for the treatment of growth failure associated with chronic renal insufficiency up to the time of renal transplantation; for the long-term treatment of short stature associated with Turner syndrome; for the long-term treatment of idiopathic short stature; and for the replacement of endogenous GH in patients with adult GH deficiency.
Pulmozyme [®] (dornase alfa)	An inhalation solution approved for the management of cystic fibrosis in patients to improve pulmonary function.
Rituxan® (rituximab)	An anti-CD20 antibody commercialized in the United States with Biogen Idec Inc. Rituxin is approved for the treatment of relapsed or refractory low-grade or follicular non-Hodgkin's lymphoma (NHL). It is also approved for the first-line treatment of follicular NHL with CVP chemotherapy and for treatment as a single agent in patients with stable disease or better following CVP chemotherapy. Finally, it is approved for the treatment, in combination with CHOP chemotherapy, of aggressive NHL and in combination with methotrexate for reducing signs and symptoms and to slow the progression of structural damage in adult patients with moderately- to severely-active rheumatoid arthritis who have had an inadequate response to one or more tumor necrosis factor antagonist therapies.
Tarceva [®] (erlotinib)	Commercialized with OSI Pharmaceuticals, Inc., a small-molecule tyrosine kinase inhibitor of the HER1/epidermal growth factor receptor-signaling pathway. Tarceva is approved for the treatment of patients with locally advanced or metastatic non-small cell lung cancer after failure of at least one prior chemotherapy regimen. It is also approved in combination with chemotherapy for the treatment of advanced pancreatic cancer in patients who have not received previous chemotherapy.
TNKase® (tenecteplase)	A modified form of t-PA approved for use in the reduction of mortality associated with acute myocardial infarction.
Xolair® (Omalizumab)	A humanized anti-IgE antibody jointly marketed with Novartis Pharmaceuticals Corporation. Xolair is approved for adults and adolescents (12 years of age and above) with moderate-to-severe persistent asthma whose symptoms are inadequately controlled with inhaled corticosteroids.

INTRODUCTION

OUR LOCATIONS

Genentech has approximately 11,000 employees company-wide, with headquarters in South San Francisco, California, and several other locations dedicated to manufacturing and distribution.



1. SOUTH SAN FRANCISCO, CALIFORNIA

Since its founding in 1976, Genentech has made its headquarters in South San Francisco, California. Starting with one rented building and two staff members, the company's South San Francisco site has grown to a full campus with over 40 buildings on the shore of the San Francisco Bay. In 1985, Genentech received approval from the U.S. Food and Drug Administration (FDA) for the first recombinant pharmaceutical product to be manufactured and marketed by a biotechnology company. Today, the site is home to a research center, manufacturing operations and various business functions.





2. VACAVILLE, CALIFORNIA

Genentech's Vacaville, California, site is located on 100 acres in Solano County, approximately 50 miles northeast of San Francisco. It was first licensed by the FDA to produce biotherapeutics in 2000. In addition to manufacturing and support services, the site also houses quality, warehousing, and administrative functions that support the Genentech manufacturing network.



3. OCEANSIDE, CALIFORNIA

The first facility of Genentech's Oceanside, California, location was purchased in 2005, and a nearby facility was purchased in 2006. The state-of-the-art commercial and clinical biotherapeutics manufacturing facilities are located on 60 acres about 35 miles north of San Diego and received FDA licensure to produce Avastin and Rituxan in 2007.



4. LOUISVILLE, KENTUCKY

Genentech's warehouse and distribution facility in Louisville, Kentucky, became operational in January 2006. The facility plays an important role in helping provide Genentech with the distribution capacity needed to support our anticipated growth, as well as enhancing our ability to get products to our patients quickly and improving responsiveness to our customers on the East Coast. Louisville's sustainability data are being included for the first time in this report.



5. HILLSBORO, OREGON

In 2006, Genentech purchased a 75-acre property 20 miles west of Portland in Hillsboro, Oregon, for the construction and development of a new state-of-the-art fill/finish facility. Genentech broke ground on the facility in December 2006. The new site is expected to be licensed in 2010. The Hillsboro site is also the location for a new west coast warehouse and distribution center that became operational in July 2008. Hillsboro's sustainability data are being included for the first time in this report.



6. TUAS, SINGAPORE

In 2007 in Tuas, Singapore, Genentech began construction on a 1,000-liter manufacturing facility for the production of Lucentis bulk product. Construction was completed on this facility in 2008. Genentech has an exclusive option to purchase an adjacent facility being constructed by Lonza Group Ltd. for the production of Avastin and Herceptin. When completed, the 80,000-liter facility will be the first large-scale bulk biotherapeutics manufacturing plant in Singapore. FDA licensure of both facilities is anticipated by early 2010. Singapore's sustainability data are being included for the first time in this report.

EVOLUTION OF SUSTAINABILITY AT GENENTECH

Strategic Review Update

In last year's report, we described the completion in 2007 of a sustainability review that led to strategic recommendations for further enhancing and refining Genentech's sustainability program. In 2008, we made progress on a number of these recommendations, including those described below.

A company-wide portfolio of completed, in-progress and potential environmental sustainability projects was prepared in 2008. The portfolio serves as a tool to capture sustainability project information from around the company, facilitate knowledge sharing between Genentech facilities and support prioritization of potential projects. During 2008, the portfolio helped us to identify and progress a range of projects that support our 2010 environmental sustainability goals.

During 2008, our Investor Relations group led the completion of the Sustainability Asset Management (SAM) questionnaire in support of Genentech's application to be listed on the Dow Jones Sustainability Index (DJSI). As a result of the efforts of Investor Relations and many other contributing departments, we were successful in our efforts to be listed on this Socially Responsible Investment (SRI) index. The DJSI is an established benchmark for tracking the performance of leading sustainability-driven companies. The SAM Assessment methodology includes general and industry-specific sustainability criteria that reach beyond the EHS issues discussed in this report. Genentech achieved the top scores for the biotechnology industry in a number of areas including corporate governance, research and development, operational eco-efficiency, occupational health and safety, and human capital development. This achievement indicates the strength of our commitments related to the wider sustainability context. Interested readers can find out more about our activities relavant to non-EHS sustainability topics using the GRI index on pages 28-31 of this report.



An important activity during 2009 will be the development of our next set of sustainability goals as we consider what our environmental sustainability commitments should be beyond 2010, the target year for achieving our current environmental sustainability goals.

EHS and Sustainability Governance

The organizational and governance structure to support Genentech's EHS Compliance and Sustainability Program is illustrated below. Genentech's Chief Compliance Officer has delegated authority for the program to the Vice President of Corporate Business Services who oversees the Director of Genentech's EHS Department. To ensure executive oversight, Genentech has established cross-functional accountabilities, guided by the EHS Compliance and Sustainability Committee, and implemented by the EHS Department and functional groups.





Green Genes, Genentech's 600-member strong employee volunteer organization, plays an important role in sustainability decision-making and in the grass roots implementation of sustainability improvement projects (see our Employee Engagement feature on page 7).

EHS MANAGEMENT SYSTEMS

Throughout 2008, we continued our implementation of a corporate EHS-management system, which emphasizes risk-based decisionmaking and resource allocation. Further progress was made on the Corporate EHS Program Specifications, which when finalized, will help to ensure effective alignment of EHS practices across all Genentech operations, a key goal for 2010. We have drafted most of the Program Specifications, and a number of pilot implementation projects are underway. An important initiative for 2009 is the development and implementation of a corporate-wide EHS Audit Program that will initially address regulatory compliance and, over time, evolve to also evaluate Genentech operations for EHS best practices.

By the end of 2008, all Genentech manufacturing, process research and development, and supply-chain organizations completed areaspecific hazard reviews and risk assessments, an important step for enabling effective ongoing risk management and mitigation. The assessments identified key focus areas for physical safety in 2008, including contractor safety and work permits (see our Contractor Safety feature on page 19).

As we described last year, our manufacturing and distribution organizations, which have the responsibility of managing a substantial portion of the company's EHS risks, are using isrs7¹ as a rating tool to track their progress towards a world-class EHS program. During 2008, audits by Det Norske Veritas (DNV) found that the manufacturing plants all met the goal of integrating EHS risk management with business processes (level seven in diagram below).

Business Process Steps to Implement World-Class EHS Management Practices



Other parts of the Genentech organization are well on their way to achieving level seven performance by 2010, including our Process Research and Development organization and new manufacturing facilities in Oregon and Singapore. There was significant collaboration among our existing and new facilities during 2008 to share best practices, such that the new facilities have been able to leverage the experience of existing facilities. Consequently, the new facilities scored well in DNV audits, despite the fact that they had only recently started commissioning their plants.

¹ isrs7 is an internationally recognized tool for measuring, improving and demonstrating EHS management system performance, developed by Det Norske Veritas (DNV).

EMPLOYEE ENGAGEMENT THROUGH GREEN GENES

2008 was a busy year for Genentech's employee volunteer green team, aptly named Green Genes. Membership expanded to 600 employees as Green Genes celebrated its 5th anniversary.

The employee sustainability suggestion website, launched at the end of 2007, generated some great ideas in 2008 which were evaluated by the Green Genes Team. The best suggestions were implemented or passed on to the Environmental Sustainability Team. The top prize for best suggestion this year was awarded for the Green Genes Pledge idea – a small pledge card summarizing good workplace environmental practices. We offered the cards to employees to sign and post in their offices to publicly demonstrate their commitment and remind themselves to turn off lights, conserve water, recycle in the correct bins, print double-sided, drink from reusable cups and not to drive to work alone.

Green Genes' annual Eco Fair, previously held only at our South San Francisco site, was expanded this year and also took place in Vacaville and Oceanside with a great turnout at each location. The Green Genes organizers shared give-aways, vendor ideas, activities and educational posters, with each team learning from the others.

Our annual Green Genes' member survey yielded interesting results, helping the club's leaders to see what issues and activities employees are most interested in pursuing. Many employees expressed an interest in getting involved, but hesitated to sign up to work on projects for fear of over-committing given their already busy schedules. We responded by increasing the ways in which they could communicate or learn while respecting their time commitments. We improved our Green Genes website by adding a wiki and blog capability, and we increased the number of lunchtime lectures and pizza/movie nights on environmental issues (e.g., solar power, wind power and composting). Specific Green Genes accomplishments can be found throughout this report, demonstrating the role that this grass roots organization plays in Genentech's overall sustainability efforts.



CLIMATE CHANGE

Climate change continues to receive significant global attention as a key environmental area of concern, and it is an important priority within Genentech's Environmental Sustainability Program.

Accounting for our Impact

At Genentech, we prioritize rigorous accounting of our greenhouse gas emissions to effectively focus our emissions reduction strategies and ensure that we are accurate in our year-on-year performance reporting. We are also committed to open and transparent reporting of our emissions, and we do so through our Sustainability Report, participation in the Carbon Disclosure Project (CDP) and membership in the California Climate Action Registry (the Registry). At the time of publication of this Report, our 2008 emissions have been subject to third-party review as part of the Registry's verification process. 2008 marked our fourth year of reporting to the Registry², and we believe that our participation ensures that we are applying some of the most stringent greenhouse gas emissions accounting standards available globally. For the second year running, we were pleased to receive the highest Carbon Disclosure Leadership Index (CDLI) rating among the biotechnology participants for our 2008 climate change submission to the CDP.

2008 saw further developments in the implementation plans for California's Global Warming Solutions Act of 2006 (AB32), which commits the State to returning greenhouse gas emissions to 1990 levels by 2020. Our South San Francisco facility is covered by certain provisions of AB32, including annual reporting of carbon dioxide (CO_2) emissions. The facility is also likely to be required to participate in an emissions trading scheme beginning in 2012 because its emissions of CO_2 attributable to stationary combustion exceed the likely thresholds to be established for mandatory participation in the program. We are considering the potential implications of the emissions trading requirements so that our new goals are well aligned with and help us to effectively prepare for the trading regime.

Our Greenhouse Gas Emissions Profile

Greenhouse gas (GHG) emissions arise directly and indirectly from Genentech's operations. As CO_2 is the most significant greenhouse gas to result from our activities, we have focused on CO_2 in our detailed accounting. Other greenhouse gases that result from our operations include methane and nitrous oxide which are produced when fossil fuels are burned (and are estimated to be less than 0.01 percent of our total emissions) and hydrofluorocarbon (HFC) refrigerants used in our cooling equipment. We will calculate 2009 emissions of these additional greenhouse gases in line with our California Climate Action Registry commitments. Direct emissions, known as Scope 1 in applicable GHG reporting standards, arise from on-site combustion of fuels, such as natural gas that we use for steam production and space heating, as well as diesel, typically used as a back-up power supply and in some vehicles that we own. Another source of direct emissions is cell respiration, which takes place within our biotechnology manufacturing process and produces CO_2 as a by-product. We completed an analysis of this source in 2008 and found that cell respiration emissions are negligible when compared with other sources such as energy use (less than 0.1 percent of our total CO_2 emissions).

Indirect emissions, known as Scope 2, arise primarily from our use of electricity, which is used to control the internal environment (e.g., lighting and air conditioning our buildings and powering process machinery, computing and other equipment at our facilities). Emissions from electricity and natural gas use represent over 70 percent of our total CO_2 emissions. Reducing onsite energy use and investigating alternative, cleaner energy options are therefore the primary focus areas for our emissions reduction strategy. Other indirect emission sources, known as Scope 3, include business travel and employee commuting. As we reported last year, we calculate emissions associated with employee commuting to and from our South San Francisco facility, at which over 75 percent of our employees are located. We also calculate business travel made by road and air.



* Emission sources that contribute <0.1 percent to our total emissions have been excluded from this graph.

As shown in the following graph, we experienced a small reduction in our total energy-derived CO_2 emissions in 2008 when compared with 2007. Our total energy consumption increased slightly over this period, due almost entirely to the commissioning of our two new facilities in Singapore and Oregon, with total consumption at our major facilities in California remaining flat between 2007 and 2008. The reduction in CO_2 emissions shown in the graph is due to a general trend towards cleaner electricity production by utilities supplying California businesses.

² Our first report to the Registry was made in 2006 when we reported 2004 and 2005 emissions. 2004 is considered a historic year.



2010 Greenhouse Gas Goal

In our 2004 Report, we committed to the following goal:

Improve energy efficiency* by 10 percent by the year 2010, compared to 2004.

 * Energy efficiency is measured as total weight of energy-related CO₂ emissions divided by units of marketed product produced.

In 2008, we took a critical look at the way we normalize our energy-related CO_2 emissions and decided that using total production rather than marketed product as the normalizing metric is a more meaningful way of defining energy efficiency for Genentech. In addition to marketed product, the production output of our manufacturing locations includes clinical product which is an important aspect of our commitment to ensuring the safety and effectiveness of our therapies, and product generated by test and qualification runs necessary for our regulatory approvals. Consequently, we have re-framed our 2010 goal using total production as the normalizing metric. The following graph shows our performance in relation to the re-framed goal between 2004 and 2008.



The graph shows that our normalized CO_2 emissions performance is on track to meet our 2010 goal. As we explained in our last report, the significant production efficiencies achieved by our manufacturing facilities between 2005 and 2007 were in large part responsible for the reduction in normalized CO_2 emissions shown for those two years. In 2008, we saw a slight increase in CO_2 emissions when normalized by production. This was partially due to the addition of over 300,000 square feet of non-manufacturing building space at our South San Francisco location. These additional buildings, which house research and development operations that are critical to our mission of ensuring a future pipeline of products to meet unmet medical needs, require energy, but do not manufacture product.

We have supplemented the production metric with a number of other efficiency metrics. Between 2007 and 2008, we achieved a 17 percent reduction in our energy derived CO_2 emissions when measured on a per-square-foot basis. The positive trend in efficiency, when measured in this way, points to the efforts of our engineering design team to integrate green building principles to new buildings, and in particular our South Campus development, as described in more detail below. When normalized by product sales, a commonly used metric in external reporting, we experienced a 17 percent reduction in energy-derived CO_2 emissions between 2007 and 2008.

During 2009 and 2010, we will continue to identify and implement ways in which we can make further energy efficiency improvements, and where appropriate, make use of cleaner sources of energy in support of our 2010 goal commitment.

Our Energy Efficiency Activities

Notable energy efficiency projects and initiatives completed or commenced by Genentech facilities in 2008 include the following:

- In the last quarter of 2008, the Safety Operations and Sustainability group under South San Francisco's Corporate Facility Services Department resolved some reliability issues that enabled internal buy-in for single boiler operation. This greatly improved efficiency of the steam plant. The operational efficiency improvements resulted in an annual natural gas avoidance of 500,000 therms, equivalent to over 2500 metric tons of CO₂.
- All three of our California production locations undertook lighting upgrade projects. As an example, our South San Francisco facility replaced lighting with higher efficiency products in three of the parking structures and in two of the buildings, resulting in an expected annual saving of over 840,000 kWh, equivalent to approximately 330 metric tons of CO₂.
- Our Vacaville facility installed a variable frequency drive in order to reduce the firing rate of the facility's third boiler. This will result in an annual electrical saving of approximately 160,000 kWh, equivalent to 65 metric tons of CO₂.

In addition to energy saving projects implemented in existing operations, green building design in new buildings continues to play a key role in our energy efficiency strategy. In last year's report, we featured our new South San Francisco South Campus development. Our efforts to integrate energy efficiency to these new buildings paid off during 2008 when we received significant financial rebates through the Savings by Design Program offered by our utility company, Pacific Gas and Electric (PG&E). This Program offers financial incentives to help offset investment in energy efficiency. The incentives are directly linked to the amount of energy saved through the green building design of our new buildings.

Congratulations on your success incorporating energy efficiency into your new South Campus buildings. PG&E is proud to have been a part of it, and to have provided Genentech with financial incentives for substantially exceeding Title 24 energy standards in these eight buildings. You will be making savings each year in energy costs and reducing annual greenhouse gas emissions by nearly 2,000 metric tons.

- ERIC JANSEN, ACCOUNT MANAGER, PG&E

SERVER VIRTUALIZATION IN GENENTECH'S DATA CENTER

Like many other companies in the biotechnology and hightechnology industries, Genentech requires an ever-increasing amount of computing power. In 2006, plans were made to build a new data center to meet this demand. Through collaboration with PG&E, we were able to avoid building a new data center by replacing 243 old servers with 68 new energy-efficient ones, providing more computing power with less energy. This project was facilitated by implementing server consolidation and virtualization, a current best practice in the "Green IT" world. Server virtualization enables one computer to run multiple operating systems and applications at the same time without interference.

Through this initiative, we have reduced our CO₂ emissions in two ways. First, we will use less electricity for computers and cooling every year. In addition, by not having to build a new data center, we avoided significant amounts of embodied greenhouse gas emissions and prevented other environmental impacts that would have arisen during the construction process.



In December 2008, PG&E witnessed the transfer of our old servers to our e-waste vendor to be sold for reuse (66%) or to be recycled (34%) and provided a rebate check and a letter of thanks for contributing 643,122 kWh annual reduction in energy use and 73.50 kW of peak demand. This followed a similar server retirement in June 2008.

USING NATURAL RESOURCES RESPONSIBLY

We have also integrated energy efficiency into the design and construction of our new Oregon and Singapore facilities. Effective internal climate control is critical in our research and development, manufacturing and product storage operations and is a large user of energy in our facilities. The optimization of cooling systems is therefore a priority for our Engineering Design Team when looking for energy saving opportunities. This was the case for our new Singapore facility in particular, due to the consistently high ambient air temperatures at that location. The building has been so efficiently insulated to minimize heat gain that the thermal transfer value, an important indicator of heat gain potential, is twice as good as what is required by Singapore's most stringent building standards. Window glazing and shading have been designed to minimize heat gain while allowing daylight to penetrate the building, which in turn reduces artificial lighting requirements.

Genentech's Commute Benefits Program continues to play an important part in the company's overall effort to reduce CO₂ emissions. The gRide Program, as it is known internally, is made up of various services and cash incentives designed to encourage employees to leave their cars at home and use alternative commute modes such as vanpooling, mass transit, "GenenBus" shuttles, biking and walking. A range of new initiatives was introduced by our gRide Team during 2008, including a new vanpool and transit pass subsidy of up to \$120/month per employee. In addition to this new subsidy, Genentech launched GenenBus routes from four additional Bay Area locations. With 14 routes utilizing 26 Wi-Fi enabled motor coaches, the GenenBus program continues to be one of our most popular benefits, serving over 2,700 employee riders every day. In 2008, Genentech saw its overall CO₂ emissions from commute travel fall almost eight percent when compared with 2007. This is significant given that approximately 13 percent of Genentech's overall CO₂ emissions are the result of South San Francisco employees commuting to work. The emission reductions were driven by an increase in overall GenenBus ridership combined with successful efforts to fill the individual buses.

Future Plans

We have a range of projects under evaluation for 2009 that, if implemented, will contribute to reducing our CO_2 emissions. These include:

- Replacement of heating, ventilation and air conditioning equipment with more efficient units, facilitated by a newly adopted Total Cost of Ownership (TCO) assessment that takes into account energy savings over the project lifespan.
- Roll-out of a Steam Trap Preventive Maintenance Program throughout the South San Francisco campus following the successful pilot project featured in last year's report.
- Optimization of the Oceanside facility's central plant operating parameters and laboratory office HVAC systems in order to reduce electricity consumption.
- Installation of a micro-turbine cogeneration unit at our South San Francisco location. The plant would generate electricity from natural gas and capture heat that is normally lost in the electricity generation process. The reclaimed heat would be used for space heating, replacing natural gas that would otherwise be used for this purpose.
- Continued enhancement of the gRide program to encourage more participation, including both a carshare and bikeshare program, and additional GenenBus routes.

THE gRIDE DASHBOARD

As Genentech's employee commute program, gRide, continues to expand, we have begun to engage employees in managing their own commute impact. In 2008 we added an employee dashboard to the gRide home page. This dashboard uses the data entered by South San Francisco employees when claiming their gRide reward dollars and automatically calculates the impact they are making individually and collectively on metrics such as CO₂ emissions, vehicle miles traveled, and money and fuel saved. The example shown here allows this employee to see that in 2008 she saved 2,360 pounds of CO₂ and 121 gallons of gas, while earning \$680 in gRide reward dollars. By selecting "Program" she could also see that, since gRide's inception in November 2006, the program has contributed to reducing employee vehicle miles traveled by 8,733,000 miles. This is the equivalent of eliminating over 350 trips around the world or 36 trips to the moon!

While reducing CO_2 emissions and vehicle miles traveled is an important goal and benefit of the gRide program, equally important is gRide's enhancement of employee quality of life, recruitment, retention and productivity.

"One of the great things about gRide is that we are positively impacting the company's people and profits while helping the planet at the same time," says Daniel McCoy, who leads Genentech's Corporate Transportation group.



ENCOURAGING BIKE USE

Genentech's Bicycle Club continues to gain momentum, thanks to some great events and new initiatives in 2008. The club attracts new members by hosting a group ride to the South San Francisco campus from multiple locations on the first Thursday of every month.

Bike commuters in South San Francisco also earn \$4 per day from the gRide program and help reduce greenhouse gas emissions. Many have found it a great way to start the day. Genentech's shuttle buses are bike-friendly, so that employees can bike part-way or one-way, if that fits their schedule best. The new towel service in the on-site showers at all our locations makes biking to work more practical.



Each May on Bike to Work Day, employees come out in force to ride to work at all our sites. In 2008, the Vacaville and Oceanside branches of the Bicycle Club sponsored a Bike to Work breakfast at their locations. There were eight organized routes coming to South San Francisco for this event, with one group riding 55 miles to work. At lunchtime on Bike to Work day, the gRide Team sponsored a barbeque in South San Francisco to recognize the riders and all Genentech employees who participate in alternative commuting. The event featured an informational fair, bike tune-ups, free bike safety lights and a zany, yet surprisingly competitive, tricycle race.



FACTORING SUSTAINABILITY INTO PURCHASING DECISIONS

Another important element of Genentech's sustainability program is our commitment to encouraging sustainable practices by companies that supply goods and services to us. By incorporating our sustainability philosophies into our procurement process, we can leverage our own internal efforts with those of our suppliers, thereby amplifying the impact of our sustainability program throughout our supply chain.

A good example of how Genentech's purchasing power can influence suppliers is the case of our new commuter bus and shuttle contract. During the "request for proposal" process, we specified that all new Genentech buses must be able to run, at minimum, on a 20 percent bio-diesel blend (B20). Many of our suppliers indicated that this was not possible because the manufacturers would not warrantee the use of bio-diesel in their new engines. As a result of our continued encouragement and commitment to using bio-diesel, one of the bidders went back to its engine supplier and received a first-of-its-kind warrantee exemption allowing the use of B20 bio-diesel in brand new Detroit Diesel engines. While it took a great deal of work for the vendor to receive this exemption, it was well worth it for them in the end, as this exemption was a part of the reason their bid was selected.

This example demonstrates how Genentech's purchasing power can result in significant changes in how companies within our supply chain conduct business. Depending on the results of data collected from our engines and our experience running bio-diesel, Detroit Diesel may decide to waive its warrantee restrictions on bio-diesel entirely. This could have a significant impact in the motor coach sector by increasing the size of the North American bio-diesel market and thereby reducing overall carbon emissions from this sector.



WATER RESOURCES

The Role of Water in our Operations

Water is an important resource for many of our activities, including manufacturing and laboratory operations. Ensuring a clean research and manufacturing environment is critical to being able to safely develop and produce our therapies, and the cleaning of tanks and other equipment is one of the most significant uses of water at our facilities (see our feature story on disposables on page 15). Water is also a key input to the production of cell growth media and purification buffers for our products and overall, manufacturing activities are responsible for approximately 60 percent of our total water use.

During 2008, we experienced a small increase (<0.05 percent) in the total amount of water used in our operations. This was almost entirely a result of our two new facilities in Oregon and Singapore coming on line. Total water use decreased at our Oceanside and Kentucky facilities and remained flat at our South San Francisco and Vacaville locations.



Water Efficiency Goal

Genentech is mindful of its responsibility to make efficient use of water, and in our 2004 Report, we publicly committed to the following goal:

Improve water efficiency* by 10 percent by the year 2010, compared to 2004.

* Water efficiency is measured as total water use divided by units of marketed product produced.

As we describe in the Climate Change section of this report, we concluded in 2008 that normalizing by total production rather than marketed product is a more meaningful way of defining environmental efficiency for Genentech, as it takes into account our important clinical and engineering production activities as well as marketed production. Consequently, we have re-framed our 2010 water efficiency goal using total production as the normalizing metric. The graph below shows our performance in relation to the re-framed goal between 2004 and 2008.



Our water efficiency performance is on track to meet our 2010 goal. The significant production efficiencies achieved by our manufacturing facilities between 2005 and 2007 were in large part responsible for the improvement in water efficiency shown for those years, and in particular for 2007. The increase in water use per unit of production in 2008 is partly explained by the specific product types manufactured at our South San Francisco facility during 2008. While these are produced in lower units of product per run than products previously manufactured at this facility, a similar amount of water is required for operations such as cleaning of equipment in order to complete runs of these different types of product.

Internally, we also consider the efficiency of our water use when normalized by the floor area of our buildings. On a per-square-foot basis, we reduced water use by five percent between 2007 and 2008. When normalized by product sales, we experienced an eight percent reduction in water use over this period.

During 2009 and 2010, we will continue to identify and implement ways to use water more efficiently.

Our Water Efficiency Activities

Water saving projects initiated and/or completed during 2008 include the installation of aerators designed to reduce faucet water flow to 500 sinks at our South San Francisco facility, a project suggested by the Green Genes Water Team. In 2008 we began evaluating two potential projects which, if fully implemented, could significantly reduce water use associated with our core production activities. One of these projects is based on the application of disposable buffer bags and bioreactors to replace stainless steel tanks that require cleaning in place. This project is described in our feature story on page 15. Another project idea is the reconfiguration of a spare reverse osmosis (RO) unit. This would allow the unit to purify rejected wastewaters from neighboring RO units, producing water for internal reuse, resulting in an estimated savings of 20,000,000 gallons of water per year.

In 2008, our Vacaville facility stepped up efforts to reduce the amount of potable water used for irrigation. The facility is using a centrallycontrolled computerized system which manages all aspects of the irrigation operation from a remote location. It will allow the use of untreated water supplied by the Solano Irrigation District which operates at a lower pressure than potable water. It also has the capability to maximize nighttime irrigation during peak watering periods to decrease evaporation loss and uses a weather station which allows for adjustment of the watering schedule based on site conditions. The system's sensors have the ability to detect adverse flow and shut it down in the event of a line break. In addition to implementing this automated system, the facility has replaced almost 500 sprinkler heads to decrease the flow rate and facilitate lower operating pressure. The Vacaville facility will be carefully monitoring the system throughout 2009 to determine its quantifiable benefits.

At our Oceanside facility, water saving projects approved for implementation in 2009 include the use of cooling tower blowdown water to quench boilers. The Oceanside facility has identified a number of additional potential projects for internal reuse of water which, if viable, could result in a significant reduction in total water use including, for example, reducing the amount of potable water used in irrigation through an expansion in the use of drought-resistant planting and increasing the use of non-potable water for irrigation.

As our new facilities in Singapore and Oregon ramp up to full operation, they will become more significant in our overall water use profile. These facilities have been designed with water efficiency in mind, as described in our feature story on this page.

INTEGRATING WATER EFFICIENCY IN OUR NEW FACILITIES

As we described last year, Genentech's Corporate Engineering group works with a Sustainability Design Checklist, based on the LEED NC (New Construction) standard to guide the identification of sustainable design areas for evaluation and implementation. This process has assisted in the application of a range of water efficiency measures to our new facilities in Oregon and Singapore.

At our Singapore facility, condensate from the air-handling units is recovered for subsequent use as make-up water for cooling tower basins. The annual water saving associated with recovery of condensate from the facility's main air-handling unit is 1,576,800 gallons, or 5,969 cubic meters. Additional make-up water is sourced from Singapore's Public Utilities Board's supply of reclaimed water known as NEWater.

At our Oregon facility, water efficiency design measures include the use of native tree and plant species appropriate to the climate, the use of water saving faucets and the installation of dual flush toilets throughout the facility. Bioswales have also been integrated to the Oregon development. These provide a natural way to filter rainwater run off from parking and roadways before reintroduction into the ground. Some of the facility's HVAC equipment condensate is also directed to the bioswales for natural filtration, thereby reducing the volume of wastewater sent to the publicly operated wastewater treatment plant.



EVALUATING THE ELIMINATION OF STAINLESS STEEL TANKS IN THE DESIGN OF NEW MANUFACTURING FACILITIES

Choosing the most environmentally friendly option can be a complex process involving trade-offs among energy, water and waste concerns. A case in point is an idea being evaluated and tested at Genentech: replacement of standard stainless steel tanks used in manufacturing with disposable bags. At first glance, one might think that this is a step in the wrong direction, adding to the amount of plastic waste we produce, but if we investigate further, we find that the environmental benefits far outweigh the increase in waste.

In an analysis in the November 2008 issue of BioPharm International by Sinclair, Leveen, Monge, Lim and Cox, implementing a disposable bag system for bioreactors and product and solution tanks was found to result in an estimated 87 percent decrease in water use and a 30 percent decrease in energy use.

The main source of these benefits is the reduction of clean-inplace (CIP) activities required. The CIP process for cell culture bioreactors and product tanks includes rinsing with water, cleaning with chemicals, rinsing again with water and then finally rinsing with Purified Water (PW) or Water-for-Injection (WFI). Following CIP, the bioreactors or product tanks are steamed-inplace (SIP) for sanitization and/or sterilization. In addition to the water and energy reduction, the study cites additional benefits from the reduction in CIP activities, such as reduced costs and fewer chemicals required. Using disposables in place of stainless steel results in a significant reduction in carbon footprint. The main driver for this reduction is the energy involved in the cleaning process, but other contributors are reduced facility size and elimination of energy required to mine, refine, fabricate and transport the steel. Even when accounting for the increase in carbon footprint from plastics production, transportation and disposal, it is estimated that using disposables reduces CO, emissions by 25 percent.

As an exciting step towards achieving reductions in energy, water and emissions in our manufacturing processes, we have installed disposable bags each holding up to 2,500 liters of buffer for use in production at our Vacaville facility. We are also using bioreactor bags in our South San Francisco and Oceanside pilot plants with each bag holding up to 500 liters of buffer.



WASTE AND RECYCLING

As Genentech has grown, the amount of waste we produce has grown too. We continue to work to reduce the impact of waste generation by first minimizing our consumption and then looking for new opportunities for reuse and recycling.

Of the 12,267 metric tons of non-hazardous waste generated at Genentech in 2008, almost half was diverted from landfill and incineration through reuse, recycling or composting. Of the diverted waste, the largest component is food-related waste. At the South San Francisco facility, the amount of waste diverted to composting increased by 30 percent in 2008 compared with 2007. Composting processes and challenges have recently been shared with the Vacaville facility representatives to help them develop their cafeteria composting plan for 2009.

The next largest category of diverted waste is cardboard and paper. In 2008, we purchased 10 million fewer sheets of paper for our printers and copiers than we did in 2007, a 12 percent reduction on a peremployee basis. Employee awareness efforts around Genentech helped drive this reduction. Many departments have implemented paperless processes, and double-sided printing is encouraged. Best practices and success stories are being disseminated by the Green Genes Recycling Team and through the Commercial organization's sustainability program to further reduce paper use.

The Commercial organization is moving towards a greater use of electronic media in its communications with customers and patients across the US and where printed materials are required, we are introducing a formal Print Sustainability Program where we establish a minimum recycled content for the paper being used to print our promotional materials, as well as ensuring that the paper is FSC (Forest Stewardship Council) certified which provides the additional benefit of strict guidelines for tracking the entire chain of custody.

We have improved our measurement processes so that we can establish a baseline and set waste-related goals. We have standardized our waste



and recycling metrics across our locations, and our site waste representatives are helping each other to identify vendors for new types of recycling. The Green Genes Recycling Team organized a field trip to our local recycling vendor's facility, where team members saw waste being sorted and recycled, and were able to ask specific questions about how to segregate trash to facilitate efficient recycling and composting. The Green Genes Recycling Team is working closely with the Facilities Department to improve signage, distribute bins and post easy-to-follow instructions on the Genentech intranet.

In last year's report, we described our electronic waste (e-waste) reuse and recycling program. During 2008, we doubled the amount of electronic equipment being donated or sold for reuse. In addition, the Green Genes Recycling Team worked with our e-waste vendor to organize our first annual employee e-waste drop off event on Earth Day, collecting over four metric tons of e-waste.



The tour of our recycling facility was an eye-opening experience. We captured a full view of our recycling efforts starting from the color-coded bins on campus to the collection, sorting and bailing of the recyclable waste at the recycling facility. After seeing our waste flow in action, we can appreciate the obstacles encountered during the recycling process. We learned that the simple actions of properly sorting waste at work can make an enormous impact downstream. We have made an employee education campaign a top priority for 2009.

- JILL FENAUX, GREEN GENES RECYCLING TEAM LEADER

During 2008 we increased the amount of recycling in the following categories across Genentech:

- Plastic used in manufacturing and laboratories (+20%)
- Electronic waste (+30%)
- Food-related waste composted (+30%)
- Wood (+109%)
- Laboratory glass (+135%)
- Scrap metal (+496%)

We continue to look for ways to reduce waste generation and to divert more waste from landfill. We survey the materials being sent to landfill and install additional special purpose bins where needed. For example, the scrap metal recycling increase resulted from the simple addition of a new metal-only recycling dumpster in a key location.



The California Integrated Waste Management Board recognizes businesses with progressive waste reduction programs through their Waste Reduction Awards Program (WRAP). Both our South San Francisco and our Vacaville facilities earned WRAP awards in 2008.

Our commitment to green building principles has also resulted in reducing waste. For example, in 2008 we constructed a new conference center in Oceanside, reusing many of the materials from existing temporary facilities. These materials included carpet tiles, electrical equipment, audio-visual equipment, doors, exit lighting and furniture. Not only did this reduce costs, but it also prevented the material from ending up in a landfill.

Our Procurement Department plays an important role in purchasing eco-friendly products, thereby assisting our waste minimization. For example, we partnered with our office supply vendor during 2008 to procure more recycled products and to use online, rather than paper, catalogs. Our Vacaville facility worked with the janitorial vendor to switch to green cleaning supplies while our South San Francisco facility switched to non-bleached paper towels in all restrooms and break areas. The Green Genes Team worked with Procurement to investigate labware suppliers offering products with minimal and recyclable packaging. These types of efforts help reduce the amount of waste we generate, and also stimulate demand for more sustainable products, thereby helping to 'close the loop.'

MEET GREEN

As part of our corporate mission to conduct business with minimal environmental impact, Genentech's Commercial organization rolled out "Meet Green" at this year's National Sales Meeting. Attendees opted to participate by committing to positive sustainable practices throughout the event and the meeting organizers took the following "green" measures in planning the meeting:

- Water coolers available for use with our new reusable water bottles
- Use of recycled name badge holders as well as eco-friendly, reusable tote bags
- Meeting handouts electronically delivered or printed double-sided using soy-based inks
- Newsletters printed on seed paper, which can be planted to produce wildflowers
- Use of hybrid or alternative fuel vehicles to transport attendees
- Reusable or electronic signage
- Recycling bins for paper, glass, plastic and aluminum
- Discontinuation of automatic daily newspaper deliveries to rooms
- Use of biodegradable to-go containers and utensils, bulk condiments and eco-friendly cleaning products

Ultimately, attendee involvement is necessary for the success of any green meeting. The Meeting and Convention Services Department introduced Meet Green at the time of registration in order to educate attendees and encourage participation.

Attendees were encouraged to adopt green practices at meeting sessions as well as in their hotel rooms. This included participating in the linen reuse program; refilling water bottles at water stations; conserving energy by turning off all lights, electronics and air conditioning when leaving rooms; recycling; and overall support of the Meet Green efforts.



RETHINK THE WAY YOU DRINK

In support of Genentech's commitment to the sustainable use of natural resources, our employees are rethinking the use of bottled water and finding more eco-friendly alternatives. Employees are making strides to reduce the impact of bottled water on the environment by using their own mugs and the filtered water stations provided rather than purchasing disposable water bottles. To help employees in their efforts, Genentech has given every employee, including those in the field, a free, reusable stainless steel water bottle.

Prior to the implementation of this initiative, disposable bottled water was widely available across our campus in offices and cafeterias. At catered luncheons and meetings, bottled water was complimentary, and at our onsite fitness center, Club Genentech, employees received unlimited, free bottled water during workouts.

In 2007, Genentech's employee-driven sustainability group, Green Genes, recognized that by minimizing the company's purchase of disposable bottled water, we could reduce campus waste and our impact on the environment. According to 2007 studies by Food and Water Watch and the Pacific Institute, Americans purchased 8.25 billion gallons of bottled water in 2006. In fact:

- 17 million barrels of oil equivalent were required to produce the plastic needed for the bottled water Americans drank in 2006. 17 million barrels of oil would fuel one million American cars for one year.
- More than 2.5 million tons of CO₂ were generated during the manufacturing of disposable water bottles Americans consumed in 2006.
- The recycling rate of disposable water bottles is low; approximately 86 percent of disposable water bottles consumed in the U.S. end up in landfills.

Green Genes members evaluated alternatives to disposable bottled water and determined that using stainless steel, reusable water bottles and the filtered water stations is the healthiest and most eco-friendly option for Genentech's nearly 11,000 employees. The group presented their findings to the EHS Compliance and Sustainability Committee and received approval and funding to implement the initiative. In October 2008, with support from the Procurement, Corporate Relations and Corporate EHS departments, Green Genes dispensed reusable water bottles to all Genentech employees, thereby inspiring them to minimize their purchasing of disposable bottled water. We have already started to see a decrease in the amount of bottles and cans recycled in 2008 in part as an outcome of this initiative, and in 2009 we expect to see a further reduction in waste.



WORKPLACE SAFETY

As we strive to advance medicine through research, development and market education, we do so with the health and well-being of our patients, employees and contractors in mind. Across our operations, our employees and contractors can be found in a range of work environments from offices to labs and manufacturing plants. Understanding how our scientists, researchers and other colleagues perform work across the many facets of our organization is critical to achieving safety excellence. We are increasing this understanding by progressively applying a range of practices, including:

- Conducting environmental, safety and health risk assessments of our operations to identify, manage and reduce risks associated with different work activities
- Inspecting offices, labs, manufacturing plants and other work areas to identify potential hazards and improve our ability to manage them
- Developing corporate standards on safety and health which provide guidance for our employees and contractors
- Promoting safety programs, guidelines, incident reporting tools, chemical information and other resources through our internal website and training programs
- Integrating risk management practices and safety considerations into routine business processes and auditing operations and management systems to monitor progress
- Benchmarking industry best practices to identify enhanced safety techniques
- Investigating substandard conditions and events to identify corrective and preventive actions to minimize reoccurrences
- · Evaluating safety programs for continuous improvement

Our dedication to maintaining and promoting a culture of safety ensures the well-being of our employees and contractors and enables us to focus on our commitment to developing and providing critical therapeutics for our patients.

Ensuring a safe workplace and respecting our environment are essential to the foundation on which we build our business and retain our right to operate everyday. Success in both areas is only possible by every employee taking responsibility for creating the highest level of safety awareness and adherence to our Environmental, Health and Safety policies.

CONTRACTOR SAFETY PROGRAM

Genentech's Contractor Safety Program is designed to increase the safety of contractors working on Genentech projects, particularly for those whose work involves high risk activities such as construction, facilities maintenance and hazardous materials handling. Our safety program helps minimize risk by ensuring contractor expertise and compliance with all applicable federal, state and local EHS laws and regulations.

Developed by our Corporate EHS staff, our new Contractor Safety Handbook and training orientation define the rules and requirements for contractors and sub-contractors working on Genentech projects. A review of industry best practices for contractor safety has served as the basis for the handbook and content of the training program. We anticipate that several thousand contractors and sub-contractors will review these materials in the coming months.

Our new corporate-wide Hazardous Work Permit system delineates the work permit process and enables informationsharing. Work permits help identify potential hazards and required safety precautions. Key to the success of this permit process is the fact that an independent third party ensures that safety precautions are in place before work commences.

During 2008, Genentech contracted with IS Networld (ISN) to implement a contractor evaluation program at our South San Francisco facility. Through a membership service, ISN pre-qualifies contractors by tracking safety records, verifying existence of EHS programs and policies and reviewing insurance certificates. As of the end of 2008, 80 percent of our South San Francisco facility contractors performing high risk activities were ISN members, and we have plans to roll out this program to our other locations during 2009.

To measure the success of our newly implemented Contractor Safety Program, we are monitoring conformance to program requirements, tracking the number of contractor safety issues reported and assessing the number of work permits issued.



EMPLOYEE SAFETY, HEALTH AND WELLNESS





 * 2008 data not available at time of publication. 2006 data point changed to ensure consistent use of BLS code in all reporting years.

SAFETY AND HEALTH PERFORMANCE TRENDS

In 2008, Genentech saw continued safety performance improvement as measured by a reduction in the number and severity of reported injuries and illnesses. Improvement is attributed in part to a successful Ergonomics Outreach Program designed to encourage early incident reporting.

As shown in the graph above, Genentech's Injury/Illness Incident Rate (IIR) has been steadily decreasing since we first began publicly reporting these figures in 2004. The IIR is the number of injury or illness cases per 100 employees requiring medical attention beyond first aid. This metric is useful for assessing the frequency of workrelated injuries and illness, identifying high-risk activities and taking practical actions to prevent injuries from occurring. This nationally recognized standard is used by the U.S. Occupational Safety and Health Administration (OSHA) and enables industry benchmarking.

The second nationally recognized metric Genentech uses to monitor safety performance is the Days Away/Restricted Time Rate (DART). The DART Rate is defined as the rate of injury or illness cases per 100 employees that result in missing one or more days of work (lost time) or working at less than full potential (restricted time).

We expected our ergonomics outreach efforts to result in an increased frequency of reporting and a concurrent decrease in the severity of the injuries or symptoms. When employees recognize the signs and symptoms of a repetitive strain injury sooner (see figure below), they will seek treatment and implement ergonomic improvements earlier, thus preventing minor injuries from becoming more severe and disabling. In 2008, the number of restricted work days increased by 48 percent, while the number of lost workdays decreased by 70 percent, reflecting a reduction in the severity of injuries reported.

Comparing Genentech's safety statistics with companies of similar risk profiles in the same industrial sector is useful in evaluating safety performance. Genentech's IIR is typically compared against the national average for the Biological Product (except Diagnostic) Manufacturing Industry (NAICS code 325414), compiled by the U.S. Bureau of Labor Statistics (BLS).

As seen in the graph above, Genentech's IIR is roughly half the rate of the national average for our industry, indicating our status as an industry safety performance leader.

Signs and Symptoms of Repetitive Strain Injury



EMPLOYEE HEALTH AND WELLNESS

At Genentech, our employees work hard to bring lifesaving drugs to patients with serious or life-threatening medical conditions. Our employees, like our patients, are mothers and fathers, sisters and brothers, and sons and daughters. It is only natural that we extend our commitment to human health to the wellness of our employees. Managed by a team of Registered Nurses and guided by the philosophy, "Live Well, Work Well," Genentech's Health and Wellness Department focuses on health promotion, health protection and health restoration. Through a robust, multi-tiered health services program, we are helping our employees and their families lead healthy, balanced lives.

Health Promotion

Recognizing that employees' work lives and personal lives are intertwined, Health Services creates engaging programs to help employees feel their best and be their most productive at home, work and play. Each month, through health campaigns, events, activities, seminars and our Health Services website, our innovative programs optimize health and enhance health awareness.

Genentech supports employees in maintaining a healthy weight by exercising and eating right. To do this, Genentech subsidizes the cost of a convenient, on-campus weight loss program which includes onsite meetings and healthy choice meal options. Nutrition information is provided on the cafeteria website to help employees make healthy food choices. In last year's report, we described how Vacaville's African Americans in Biotechnology employee group organized a Health and Fitness Challenge. Teams of four to six employees competed to win prizes for losing the most weight. Over a period of six months, Vacaville's 230 participating employees lost an average of seven pounds per person for a total of 1,615 pounds!

In addition to Genentech's state-of-the-art onsite gym in South San Francisco, many enjoy the walking trail that now extends along the bay to the South Campus facilities. In 2008, Genentech celebrated the opening of our new Clubhouse, a 6,800-square-foot recreation and



relaxation facility for Genentech employees. Ping-pong and other table games, wireless internet access and a café are a few of the Clubhouse's convenient and engaging offerings. Genentech offers gym memberships for all Genentech employees regardless of work location.

In 2008, our Know Your Numbers campaign encouraged employees to take advantage of easy-to-use, online tools to evaluate their risk of developing diseases like high blood pressure, blood cholesterol disorders, Type 2 Diabetes, heart disease and stroke. Through this campaign, employees learned that they can reduce their risk of disease by measuring, monitoring and controlling their Body Mass Index (BMI), blood glucose, blood pressure and lipid profile.

Nurses conduct health seminars on a variety of topics like "Heart Health" and "Taking Care of Yourself and Your Team." The number of departmental requests for these seminars demonstrates our culture of health.

Since our employees work at multiple locations, our corporate intranet is considered the primary source for dissemination of company-wide information. Via the internal Health Services website, employees can learn about general wellness and injury and illness prevention. Employees can conveniently make onsite health care center appointments, get answers to health-related questions, report accidents and join Weight Watchers, among other things. See the feature story about onsite Health Centers for more information.

For our field-based employees who do not operate from a Genentech office, health and wellness clinics are available at various offsite meetings. Services include general health consultations, flu shots and wellness seminars.

Health Protection

Health Services' second focus is to provide employees with the means to protect themselves from injury and illness. Easily accessible immunization and ergonomics programs help our employees manage their health and "Live Well."

Since annual immunizations remain the single best protection against influenza, we offer free flu shots to employees. Annual flu clinics are held prior to flu season at convenient locations on campus and at sales meetings. They are also available for our remote workers through an online coupon program. In 2008, nearly half of Genentech's U.S. workers received the annual flu shot through this program. We also encouraged contractors working onsite to get flu shots by offering them for a small fee.

Genentech also provides immunizations and travel health kits for employees traveling to regions with confirmed cases of avian influenza. Health kits include tip sheets for staying healthy while traveling, medications, N-95 respirators, nitrile gloves, digital thermometers and anti-microbial wipes. They provide a first step toward protecting employees from illness while on business travel.

EMPLOYEE SAFETY, HEALTH AND WELLNESS

As part of Health Protection, all new employees are provided with the opportunity to complete a voluntary, confidential health history questionnaire. The information is used to proactively assist and accommodate employees in the event of a health problem or injury while at work.

In last year's report, we featured our new ergonomics program, including personalized risk assessments and training to help individuals reduce risks related to workstation set-up and work practices. During 2008, we rolled out the Ergonomics Improvement Process, which helps employees recognize and mitigate potential ergonomic risk. To support this program, we opened two new showrooms at our South San Francisco facility, staffed by ergonomic specialists skilled in assessing the various



Genentech environments, including manufacturing plants, offices and laboratories. These new ergonomics interventions compliment our existing efforts, are scalable and offer a sustainable way to keep our employees at their best.

Health Restoration

Health restoration for those who have been injured at work is of utmost importance. Through our Outcomes-Based Care Management, Genentech's Occupational Health Nurses proactively manage the care of injured employees. In alignment with national best practice guidelines for disability duration, nurses link intervention strategies with results to ensure injured employees recover fully. In more than 80 percent of our cases, Genentech performs better than the national disability duration benchmark, reflecting our commitment to health restoration.

Program effectiveness is also measured against the national benchmark Days Away/Restricted Time Rate (DART) so that risk mitigation measures can be effectively prioritized. DART analysis highlights specific job tasks or work areas where injuries occur. These findings are used to design and implement a framework for continuous quality improvement of health restoration programs.

Genentech strives to select the best clinics and physicians to ensure the delivery of quality care for all employees. Our board-certified nurses, being familiar with our workforce, workplace and culture, oversee care and serve as health advocates to ensure the long-term health and well being of our employees.

RESEARCH BLOOD PROGRAM

Many Genentech employees contribute to the health of the community through blood donation. At Genentech, employees can donate to the local blood bank during onsite blood drives, or they may choose to donate at the Genentech Health Services clinic in South San Francisco to support research. Blood drives take place quarterly at each of the California sites. During 2008, Genentech Health Services facilitated 539 blood donations to the community, while approximately 170 employees donated regularly to the Research Blood Program.

The Genentech Health Services Research Blood Program in South San Francisco supplies blood essential for performing biotechnology research. The blood is used to investigate fundamental cell biological mechanisms responsible for complex phenomena such as the body's immune response. In particular, studies focus on the roles of immune cells in mounting an effective immune response and on testing of potential therapeutic agents. Employees who donate their blood on a regular basis to the Research Blood Program enjoy the satisfaction derived from supporting the development of medicines for unmet medical needs in an intimate way. Researchers request blood on a daily basis, and eligible donors are scheduled to come to the Health Services clinic each morning for donations. The program has increased in participation over the 20 years since its inception, with a 45 percent increase over the past four years. Employees are so enthusiastic about participation that there is a waiting list to be in the program. "When I was a post-doc here, I used a lot of blood in my research. It was important for me to be able to make very specific requests and to get fresh samples. Now that I am a scientist, I donate blood myself because I know how important it is," said one long-term research blood donor. Employee safety and confidentiality, as well as ethical integrity, is of utmost importance; our nursing staff monitors employee health while an independent Institutional Review Board oversees program certification.

ONSITE HEALTH CENTERS

Note: Joe Gene is not a real person; he is a composite of several onsite health center patients who have experienced repetitive strain injury. We do not publish information about individual cases in order to protect patient confidentiality. We are telling his "story" to highlight how our employees benefit from our onsite health centers.

Joe Gene, a 35-year old Genentech Research Associate, was anxious that he would not be able to use his hands to complete his research. Ergonomics issues inherent in lab-work caused his arms to feel sore and his grip to feel weak. His work was important to him, and this injury was not only slowing his research, it was impacting his personal life. The discomfort caused him to have trouble sleeping and prevented him from riding his bike on the weekends.

One Monday morning after an uncomfortable and frustrating weekend, Joe decided to seek medical attention. He visited Genentech's Health Services intranet and booked a same-day appointment at the onsite health center. At 2:00 p.m., Joe walked from his lab to the clinic and was seen immediately by a board-certified nurse practitioner. The nurse determined that working in the lab with outstretched arms had strained his shoulder muscles. The inflamed, tight muscles had compressed the nerves that run to his hands, causing numbness, weakness and pain. The nurse diagnosed Joe with repetitive strain injury – a family of ailments caused by repetitive motion and poor posture.

The nurse developed a holistic, comprehensive treatment plan to get Joe on the road to recovery. The treatment plan integrated strategies for pain management and physical recovery with a complete lifestyle evaluation to prevent the injury from happening again. Treatment included modified work duty, medication, a referral to a certified therapist for physical therapy and an ergonomic work station evaluation.



After implementing significant lifestyle changes and making ergonomic modifications to his workstation, Joe has comfortably resumed work and personal interests, thanks to the attentive nurses at the onsite health center.

Every year, employees like Joe Gene benefit from the convenience of Genentech's onsite health centers. These centers provide opportunities for early evaluation, immediate care and treatment, identification of the root cause of an issue and prevention of repeat injuries due to increased employee awareness. In 2008, close to 300 employees per month visited our largest health center located at the South San Francisco facility.

Onsite health centers located at our South San Francisco, Vacaville, and Oceanside facilities are open Monday through Friday and offer occupational injury and illness care, occupational health consultations and evaluations, employee education, wellness seminars and other health-related services. Employees working remotely can also enjoy the same benefits and experience seamless, quality care.

The Genentech Health Services Department has been instrumental in the improvement of my personal health. The nursing staff provided good direction and counsel, directing me to my personal physician after I had sought information on health-related issues. The staff was supportive and kept my information confidential. I'm glad the Health Services Department is here – it has helped me be healthy, happy, AND here!

- CHRIS W.

SUSTAINABILITY DATA AND NOTES

Sustainability Metric	Units	2004	2005	2006	2007	2008
Energy Use	1000 GJ					
Electricity		680	743	858	998	1,052
Natural Gas		726	795	991	1,237	1,273
Diesel Fuel		28	36	43	16	12
Total Energy Use		1,434	1,574	1,892	2,251	2,337
Energy-Related Greenhouse Gases	Metric tons CO ₂					
Direct Emissions						
Natural Gas		36,417	39,805	49,607	62,245	64,078
Diesel Fuel		2,022	2,428	3,126	1,138	801
Indirect Emissions						
Electricity		69,202	75,400	90,207	110,461	98,360
Total Energy-Related GHG Emissions		107,641	117,633	142,940	173,844	163,239
Transportation-Related Greenhouse Gases	${\rm Metric\ tons\ CO}_{_2}$					
Business Travel (Road)		7,226	7,989	9,323	10,027	10,135
Business Travel (Air)		13,855	17,179	19,797	20,594	26,325
Employee Commuting (SSF only)		Not available	Not available	33,088	30,972	28,581
Total Transportation-Related GHG Emissions ³		21,081	25,168	29,120	30,621	36,460
Volatile Organic Compound (VOC) Emissions	Metric tons	18.3	18.7	21	22	24
Total Water Use	Cubic meters	1,624,318	1,655,026	2,397,769	2,538,855	2,607,260
Hazardous Waste (including U.SRegulated waste)	Metric tons					
Incineration		-	336	440	460	477
Landfill		_	110	3,0854	75	90
Recovery (Recycling)		_	31	44	41	50
Other Recovery ⁵		_	_	-	22	14
Other Treatment		_	1,851	3,165	3,700	3,900
E-Waste Reuse/Recycling		-	-	-	172	262
Total Hazardous and other U.SRegulated Waste		Not available ⁶	2,328	6,734	4,470	4,793
Non-Hazardous Waste (excluding U.SRegulated waste)	Metric tons					
Incineration		0	0	0	6	507
Landfill		2,427	3,089	3,583	5,949	6,791
Recovery (Recycling)		766	1,454	3,024	2,645	2,374
Other Recovery ⁸		-	-	-	2,473	3,053
Total Non-Hazardous Waste Generation		3,193	4,543	6,607	11,068	12,268
Recovery Rate (non-hazardous waste)	%	24	32	46	46	45
Safety Metrics						
Injury/Illness Incident Rate	-	1.9	1.6	1.4	1.3	1.2
Days Away/Restricted Time Rate	-	1.4	1.0	0.8	0.6	0.7

³ For the purpose of comparison with past years, the Total Transportation-Related GHG emissions do not include the employee commuting emissions.

⁴ The large increase in landfilled hazardous waste during 2006 is due to a ground excavation project completed by Genentech as part of a brownfield development. This project resulted in the excavation of 2,971 metric tons of soil containing naturally occurring asbestos. Removal of this waste stream from the figures results in a total 2006 hazardous waste figure of 3,763 metric tons. ⁵All recovered hazardous waste is shown under the Recovery (Recycling) category for 2004-2006, although a small proportion during these years will have been subject to other forms of recovery such as

fuels blending. We started to distinguish between recycling and other forms of recovery in our tracking systems in 2007. The recovery of hazardous waste results from the good management practices of our

hazardous waste vendors. ⁶ In our 2004 Report, we reported data on a specific type of regulated waste generated by our production facilities known as TMAC (tetramethylammonium chloride). We have not included this data in the 2004 column as it is not comparable with the full hazardous waste data set provided for subsequent years.

⁸ All recovered non-hazardous wate is shown under the Recovery (Recycling) category for 2004-2006, although a small proportion during these years will have been subject to other forms of recovery such as composting. We started to distinguish between recycling and other forms of recovery in our tracking systems in 2007.

NOTES TO SUPPORT THE DATA TABLE

General Notes

- The 2008 data presented in this report is for the following production and fill/finish facilities: South San Francisco, Vacaville and Oceanside, California; Hillsboro, Oregon; and Tuas, Singapore. The data also includes the research, development, commercial and administrative offices at our South San Francisco headquarters and our Louisville, Kentucky distribution facility.
- This report does not include performance data for joint ventures or outsourced operations. Nor does it include data for sales offices.
- The 2007 and 2008 data presented in this report excludes the Porriño, Spain, facility which was sold to Lonza at the end of 2006.
- In 2008, we updated our reporting policy. We now report data at new facilities from the point at which Genentech becomes responsible for payment of utilities and other services, such as waste disposal.
- In line with the above-mentioned policy, the 2006 and 2007 data reported in our previous Sustainability Report have been updated in this Report to include our Louisville, Kentucky warehouse and distribution facility.
- All figures in the Data Table, with the exception of figures less than 20, are rounded to the nearest whole number. Due to this rounding, the individual elements of the Data Table may not add up to the totals.
- All electricity, natural gas and water data are based on meter reading data provided by our utility vendors. Data are presented for buildings owned by Genentech and for which Genentech holds a capital lease. No data are shown for buildings which Genentech owns and leases out to third parties.

Energy-Related Greenhouse Gases (GHG)

- These data present greenhouse gas emissions associated with the combustion of natural gas and diesel fuel by Genentech's production facilities (Scope 1 emissions), and indirect greenhouse gas emissions associated with the use of electricity (Scope 2 emissions).
- Greenhouse gas emissions have been calculated in line with the applicable version of the California Climate Action Registry's General Reporting Protocol. The greenhouse gas emissions reported for 2005, 2006, 2007 and 2008 are consistent with the data submitted by Genentech to the Registry and verified by a third party under the CCAR program.
- In line with the requirements for years one through three of the Registry's program, we have calculated CO₂ emissions associated with our energy use. Other greenhouse gas emissions (e.g., methane and nitrous oxide) are estimated at 0.005 percent of our total energy related emissions.

Transportation-Related Greenhouse Gases (GHG)

- Business Travel
 - The road travel data present CO₂ emissions arising from U.S.-based road travel by Genentech employees for business purposes. The air travel data present CO₂ emissions arising from flights made by Genentech employees, which originated in the United States and which were booked through Genentech's official travel agency. Travel booked through alternative means is not included.
 - For road travel emissions calculations, we use an emission factor of 0.35kg CO₂/mile for road travel. The factor is based on 8.87kg CO₂/gallon of gasoline (source: Energy Information Administration) and an average fuel economy of 25.4 miles/ gallon (source: US Department of Energy Transportation Energy Data Book, 2007).
 - For air travel emissions calculations, we use the World Resource Institute's Mobile Combustion Emissions Tool, version 2.0 (June 2006). For 2004 through 2007, the air travel emissions calculation was made using a conversion factor of 0.19kg CO₂/mile for medium haul flights. Starting in 2008, we have divided the flight data into short, medium and long haul and used conversion factors 0.24, 0.19 and 0.18kg CO₂/mile, respectively.
- Employee Commute Emissions
 - Employee commuting emissions estimates were based on the results of cordon counts to establish modal split at the point of entry to Genentech's South San Francisco facility. These data were supported by additional information related to the Genentech shuttle fleet and data available from third parties, such as emission factors for the local public transit provider, Bay Area Rapid Transit. The study makes several assumptions such as the average distance traveled by Genentech employees traveling alone and the composition of the Genentech employees' vehicle fleet. The WRI/WBSCD Employee Commute tool was used as the source for CO₂ conversion factors.
- Onsite Vehicle Fleet
 - We do not report emissions from Genentech's onsite fleet because these emissions fall beneath the 5 percent de minimis threshold for our reporting of greenhouse gas emissions to the California Climate Action Registry.

Site / Year	Emission Factor	Source
South San Francisco, Vacaville and Oceanside, California		Regional emission factors for California (WECC) ⁹
2004-2006	0.805 lb/kWh	
2007	0.879 lb/kWh	
2008	0.724 lb/kWh	
Porriño, Spain		Country-specific emission factors for Spain ⁹
2004	0.843 lb/kWh	
2005-2006	0.869 lb/kWh	
_ouisville, Kentucky		Regional emission factors for Kentucky (SRTV) ⁹
2006	1.373 lb/kWh	
2007	1.495 lb/kWh	
2008	1.510 lb/kWh	
Hillsboro, Oregon		Regional emission factor for Oregon (NWPP) ⁹
2008	0.902 lb/kWh	
Tuas, Singapore		Country-specific emission factor for Singapore ⁹
2008	1.199 lb/kWh	
Natur	al Gas-Related CO Emi	ission Factors
Site / Year	Emission Factor	Source
South San Francisco. Vacaville, Oceanside.		United States-wide emission factors ⁹
_ouisville, Hillsboro		
2004-2006	5.279 kg CO ₂ /therm	
2007-2008	5.306 kg CO ₂ /therm	
Tuas, Singapore		Country-specific emission factor ¹⁰
2008	5.920 kg CO ₂ /therm	
Die	esel-Related CO ₂ Emissi	on Factors
Site / Year	Emission Factor	Source
South San Francisco, Vacaville, Oceanside,		Emission factors for distillate fuel oil (#1, 2 and 4) 9
Louisville, Hillsboro, Porriño, Singapore	10.05 1.00 / 11	
2004-2006	10.05 kg CO_2 /gallon	
2002 2009	10.15 kg CO./gallon	

Volatile Organic Compound (VOC) Emissions

- VOC emissions figures reflect solvent wipe cleaning associated with manufacturing. Other sources of VOCs (such as boilers and generators) are excluded.
- The products included in the data are alcohol wipes, solution (70 percent alcohol/30 percent water) and reagent alcohol (100 percent alcohol). The solvent types represented are ethanol, methanol and isopropanol.
- The methods for calculating VOC emissions vary by site to align with the local air quality management district's regulatory procedures. For South San Francisco, Vacaville and Singapore, the data are based on an assumption that 100 percent of the solvent used by Genentech is emitted to air as VOCs. In practice, the actual VOC emissions are likely to be lower because some solvent will be retained on used wipes. For Oceanside, the VOC emissions calculations take into account the amount of solvent retained on used wipes, and removed from the facility as drummed waste.

Hazardous Waste (Including U.S.-Regulated Waste)

- Hazardous waste includes waste regulated as hazardous under federal or national law and for the U.S. sites, waste regulated as hazardous in the applicable state and waste regulated as universal under federal law.
- Regulated waste reported under the "Other Recovery" category in 2007 and 2008 represents organic waste which is sent offsite for use as an incineration fuel.
- Waste reported under the "Other Treatment" category is subject to wastewater treatment or stabilization.
- TMAC waste is an aqueous by-product of a purification process used at our production facilities and is sent for treatment at an offsite wastewater treatment plant. TMAC makes up over 90 percent of our total waste that is regulated as hazardous.
- We have added a new category of regulated waste into this table for electronic waste taken off site by our e-waste vendor for reuse or recycling. Included are electronic items such as computers, monitors, keyboards, lab equipment and cell phones. We added data for both 2007 and 2008. For previous years, reliable data are not available for the larger electronic waste items, and the smaller electronic items were included in the hazardous waste recycling category.

Non-Hazardous Waste Production (Excluding U.S.-Regulated Waste)

- The data are for all waste types that are not captured in the hazardous waste category.
- The data are based on actual weights where these are available (e.g., Tyvek) and estimates elsewhere. Starting in 2008, most categories of waste were estimated using a standard weight per container combined with the number of container pick-ups during the reporting year. The standard weights are based on the National Recycling Coalition Measurement Standards and Reporting Guidelines; EPA; FEECO and CIWMB 2006. We have applied these same standard weight conversions to our 2007 data to enable better comparison.
- Due to a lack of reliable information from some new facilities during the transition from construction to operation, the nonhazardous waste data are not included for 2005 for Oceanside or 2008 for Hillsboro.
- Recovery rate (%) is the total weight of recycled and composted waste divided by the total weight of recovered and non-recovered waste x 100.

Injury and Illness Rate (IIR)

• IIR is measured as the number of injury and illness cases per 100 employees that resulted in medical treatment beyond first aid. The equation for calculating the IIR is:

Number of injuries/illnesses that resulted in medical attention beyond first aid

X 200,000

Total hours worked by all employees in the past year

Days Away/Restricted Time Rate (DART)

• The DART rate is measured as the number of injury and illness cases per 100 employees that resulted in missing one or more days of work or working with restrictions for one or more days. The equation for calculating the DART is:

Number of injuries/illnesses that resulted in an employee losing one or more days of work or working one or more days with restrictions

X 200,000

Total hours worked by all employees in the past year

27

The following index is based on the Global Reporting Initiative (GRI) framework and is made available to aid readers in locating sustainability information in a variety of Genentech publications. We have addressed all of the GRI disclosures and core indicators. For more information on GRI, please see http://www.globalreporting.org/Home.

Legend

We provide complete information on this indicate	r
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$\bigcirc \bigcirc$	We provide	partial	information	on	this	indicator
\mathbf{v}	no promao	partial		••••		

OO We do not provide information on this indicator

Indicato	r Description	Status	Where to find information
GRI G3	STRATEGY AND PROFILE		
Strategy	and Analysis		
1.1	Statement from the most senior decision-maker of the organization (e.g., CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and its strategy	00	Sustainability Report: CEO Message
1.2	Description of key impacts, risks and opportunities	$\bigcirc \bigcirc$	Sustainability Report: CEO Message
Profile			
2.1	Name of the organization	$\bigcirc \bigcirc$	Sustainability Report: Introduction
2.2	Primary brands, products and/or services	$\bigcirc \bigcirc$	Sustainability Report: Introduction
2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries and joint ventures	00	Annual Report/10-K
2.4	Location of organization's headquarters	$\bigcirc \bigcirc$	Sustainability Report: Introduction
2.5	Number of countries where the organization operates and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report	00	Annual Report/10-K
2.6	Nature of ownership and legal form	$\bigcirc \bigcirc$	Annual Report/10-K
2.7	Markets served (including geographic breakdown, sectors served and types of customers/beneficiaries)	•0	Annual Report/10-K
2.8	Scale of the reporting organization, including: number of employees, net sales, total capitalization broken down in terms of debt and equity, and quantity of products or services provided	•0	Annual Report/10-K
2.9	Significant changes during the reporting period regarding size, structure or ownership	$\bigcirc \bigcirc$	Annual Report/10-K
2.10	Awards received in the reporting period	$\bigcirc \bigcirc$	Awards and Recognition page on web: http://www.gene.com/ gene/about/corporate/awards/
Report P	Parameters		
3.1	Reporting period (e.g., fiscal/calendar year) for information provided	$\bigcirc \bigcirc$	Sustainability Report: Introduction
3.2	Date of most recent previous report (if any)	$\bigcirc \bigcirc$	Sustainability Report: Introduction
3.3	Reporting cycle (annual, biennial, etc.)	00	
3.4	Contact point for questions regarding the report or its contents	$\bigcirc \bigcirc$	Sustainability Report: Introduction
3.5	Process for defining report content, including determining materiality, prioritizing topics within the report and identifying stakeholders the organization expects to use the report	•0	Sustainability Report: CEO Message
3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers)	$\bigcirc \bigcirc$	Sustainability Report: Sustainability Data & Supporting Notes
3.7	State any specific limitations on the scope or boundary of the report	$\bigcirc \bigcirc$	Sustainability Report: Sustainability Data & Supporting Notes
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations and other entities that can significantly affect comparability from period to period and/or between organizations	00	Sustainability Report: Sustainability Data & Supporting Notes
3.10	Explanation of the effect of any re-statements of information provided in earlier reports and the reasons for such re-statement (e.g., mergers/acquisitions, change of base years/periods, nature of business, measurement methods)	00	Sustainability Report: Sustainability Data & Supporting Notes, Using Natural Resources Responsibly
3.11	Significant changes from previous reporting periods in the scope, boundary or measurement methods applied in the report	$\bigcirc \bigcirc$	Sustainability Report: Sustainability Data & Supporting Notes
3.12	Table identifying the location of the Standard Disclosures in the report	$\bigcirc \bigcirc$	Sustainability Report: GRI Index

Indicato	r Description	Status	Where to find information
Governa	nce, Commitments and Engagement		
4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight	••	Governance Principles on web: http://www.gene.com/gene/ir/ governance/ Proxy Statement Sustainability Report: Sustainability Strategy & Governance
4.2	Indicate whether the Chair of the highest governance body is also an executive officer (and, if so, their function within the organization's management and the reasons for this arrangement)	•0	Annual Report/10-K/Proxy Statement
4.3	For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members	00	Annual Report/10-K/Proxy Statement
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body $% \left({{{\mathbf{x}}_{i}}} \right)$	$\bigcirc \bigcirc$	Annual Report/10-K/Proxy Statement
4.14	List of stakeholder groups engaged by the organization	00	
4.15	Basis for identification and selection of stakeholders with whom to engage	00	
GRI G3	PERFORMANCE INDICATORS – ENVIRONMENTAL		
Material	S		
EN1	Materials used by weight or volume	00	
EN2	Percentage of materials used that are recycled inputs	00	
Energy			
EN3	Direct energy consumption by primary energy source	$\bigcirc \bigcirc$	Sustainability Report: Using Natural Resources Responsibly; Sustainability Data & Supporting Notes
EN4	Indirect energy consumption by primary energy source	$\bigcirc \bigcirc$	Sustainability Report: Using Natural Resources Responsibly; Sustainability Data & Supporting Notes
Water			
EN8	Total water withdrawal by source	$\bigcirc \bigcirc$	Sustainability Report: Using Natural Resources Responsibly; Sustainability Data & Supporting Notes
Bio-Dive	rsity		
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	00	
EN12	Description of significant impacts of activities, products and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	00	
Emissior	ns, Effluents, Waste		
EN16	Total direct and indirect greenhouse gas emissions by weight	$\bigcirc \bigcirc$	Sustainability Report: Using Natural Resources Responsibly; Sustainability Data & Supporting Notes
EN17	Other relevant indirect greenhouse gas emissions by weight	•0	Sustainability Report: Using Natural Resources Responsibly; Sustainability Data & Supporting Notes
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved	$\bigcirc \bigcirc$	Sustainability Report: Using Natural Resources Responsibly
EN19	Emissions of ozone-depleting substances by weight	00	
EN20	NO, SO, and other significant air emissions by type and weight	$\bigcirc \bigcirc$	Sustainability Report: Sustainability Data & Supporting Notes
EN21	Total water discharge by quality and destination	00	
EN22	Total weight of waste by type and disposal method	$\bigcirc \bigcirc$	Sustainability Report: Using Natural Resources Responsibly; Sustainability Data & Supporting Notes
EN23	Total number and volume of significant spills	00	
Products	5/Services		
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation	00	
EN27	Percentage of products sold and their packaging materials that are reclaimed by category	00	
Complia	nce		
EN28	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations	00	

Indicato	r Description	Status	Where to find information		
GRI G3	PERFORMANCE INDICATORS – HUMAN RIGHTS				
Investme	ent and Procurement Practices				
HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening	00			
HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken	00			
Non-Disc	crimination				
HR4	Total number of incidents of discrimination and actions taken	00			
Freedom	of Association				
HR5	Operations identified in which the right to exercise freedom of association and collec- tive bargaining may be at significant risk, and actions taken to support these rights	00			
Child La	bor				
HR6	Operations identified as having significant risk for incidents of child labor and measures taken to contribute to the elimination of child labor	00			
Forced a	nd Compulsory Labor				
HR7	Operations identified as having significant risk for incidents of forced or compulsory labor and measures to contribute to the elimination of forced or compulsory labor	00			
GRI G3	PERFORMANCE INDICATORS – LABOR PRACTICES AND DECENT WORK				
Employn	nent				
LA1	Total workforce by employment type, employment contract and region	00			
LA2	Total number and rate of employee turnover by age group, gender and region	00			
Labor/Ma	anagement Relations				
LA4	Percentage of employees covered by collective bargaining agreements	00			
LA5	Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements	00			
OHS					
LA7	Rates of injury, occupational diseases, lost days and absenteeism and number of work related fatalities by region	00	Sustainability Report: Employee Safety, Health & Wellness; Sustainability Data & Supporting Notes		
LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families or community members regarding serious diseases	00	Sustainability Report: Employee Safety, Health & Wellness		
Training	and Education				
LA10	Average hours of training per year per employee by employee category	00			
Diversity	and Equal Opportunity				
LA13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership and other indicators of diversity	•0	Diversity page on web: http://www.gene.com/gene/about/ diversity/		
LA14	Ratio of basic salary of men to women by employee category	00			
GRI G3	PERFORMANCE INDICATORS – SOCIETY				
Commur	ity				
S01	Nature, scope and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating and exiting		Corporate Giving and Grants page on web: http://www.gene.com/gene/about/community/		
Corruption					
S02	Percentage and total number of business units analyzed for risks related to corruption	00			
S03	Percentage of employees trained in organization's anti-corruption policies and procedures	00	Commercial and Development Compliance page on web: http://www.gene.com/gene/about/corporate/compliance/		
S04	Actions taken in response to incidents of corruption	00	ouop.ntm		

GRI INDEX

Indicato	r Description	Status	Where to find information		
Public Policy					
S05	Public policy positions and participation in public policy development and lobbying	•0	Public Policy page on web: http://www.gene.com/gene/about/ views/		
Compliance					
S08	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with laws and regulations	00			
GRI G3 PERFORMANCE INDICATORS – PRODUCT RESPONSIBILITY					
Custome	er Health and Safety				
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures	•0	Clinical Trials page on web: http://www.gene.com/gene/pipe- line/trials/		
Product	Service Labeling				
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements	00			
Marketir	ng Communications				
PR6	Programs for adherence to laws, standards and voluntary codes related to marketing communications, including advertising, promotion and sponsorship	•0	Commercial and Development Compliance Programs page on web: http://www.gene.com/gene/about/ corporate/compliance/cdccp.html		
GRI G3	PERFORMANCE INDICATORS – ECONOMIC				
Econom	ic Performance				
EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments	00	Corporate Giving and Grants page on web: http://www.gene.com/gene/about/community/		
			Annual Report/10-K		
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change $% \left({{{\mathbf{r}}_{i}}} \right)$	00			
EC3	Coverage of the organization's defined benefit plan obligations	•0	Benefits page on web: http://www.gene.com/gene/careers/ benefits/		
EC4	Significant financial assistance received from government	00			
Market Presence					
EC6	Policy, practices and proportion of spending on locally-based suppliers at significant locations of operation	00	Community page on web: http://www.gene.com/gene/about/ community/community/		
EC7	Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation	00			
Indirect Economic Impacts					
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind or pro bono engagement	00			

INDEPENDENT VERIFICATION STATEMENT

Introduction and Objectives of Work

Bureau Veritas has been engaged by Genentech to conduct an independent verification of its 2008 Corporate Sustainability Report. This Verification Statement applies to the related information included within the scope of work described below.

This information and its presentation in the 2008 Corporate Sustainability Report are the sole responsibility of the management of Genentech. Bureau Veritas was not involved in the drafting of the Report. Our sole responsibility was to provide independent verification on the accuracy of information included.

Scope of Work

Genentech requested Bureau Veritas to provide assurance for the following:

Data and information included in the 2008 Corporate Sustainability Report.

Excluded from the scope of our work is any verification of information relating to:

- Activities outside the defined verification period;
- Positional statements (expressions of opinion, belief, aim or future intention by Genentech) and statements of future commitment; and
- The GRI Index Section and data and information referenced in other corporate documents and publications.

Methodology

As part of its independent verification, Bureau Veritas undertook the following activities:

- 1. Interviews with relevant personnel of Genentech;
- 2. Review of documentary evidence to support claims made in the 2008 Sustainability Report;
- 3. Audit of performance data, a sample of which was back to the source;
- 4. Review of Genentech's systems for quantitative data aggregation and analysis;
- 5. Concurrent verification of the 2008 Genentech GHG assertion for California operations was completed under the verification protocols of the California Climate Action Registry.

Our work was conducted against Bureau Veritas' standard procedures and guidelines for external Verification of Sustainability Reports, based on current best practice in independent assurance. For this assignment, we have used the International Standard on Assurance Engagements (ISAE) 3000, "Assurance Engagements Other than Audits or Reviews of Historical Financial Information", developed by the International Federation of Accountants.

The work was planned and carried out to provide limited, rather than absolute assurance and we believe it provides an appropriate basis for our conclusions.

Our Findings

On the basis of our methodology and the activities described above:

- Nothing has come to our attention to indicate that the reviewed statements within the scope of our verification are
 inaccurate and the information included therein is not fairly stated;
- It is our opinion that Genentech has established appropriate systems for the collection, aggregation and analysis of quantitative data such as that provided in the 2008 Corporate Sustainability Report.

Statement of independence, impartiality and competence

Bureau Veritas is an independent professional services company that specializes in Quality, Health, Safety, Social and Environmental management with almost 180 years history in providing independent assurance services, and an annual turnover of \$3 billion (US).

No member of the assurance team has a business relationship with Genentech, its Directors or Managers beyond that required of this assignment. We have conducted this verification independently, and there has been no conflict of interest.

Bureau Veritas has implemented a Code of Ethics across the business to maintain high ethical standards among staff in their day to day business activities.



Bureau Veritas Certification Houston, TX May 2009





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