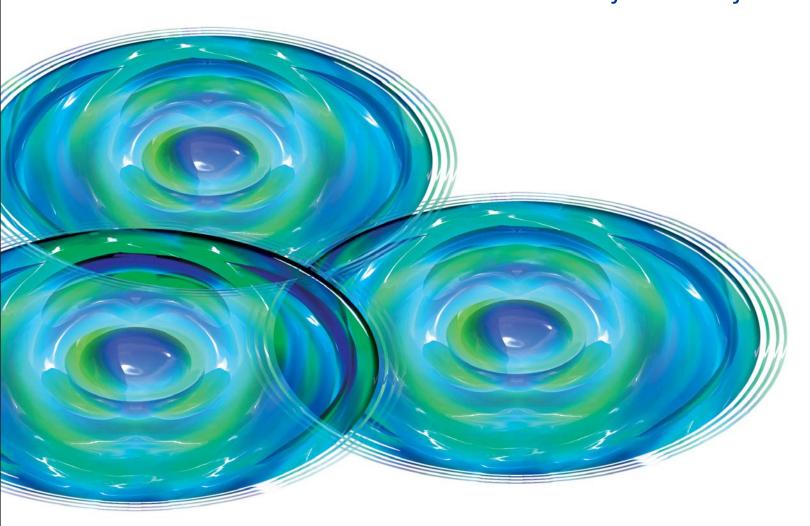
JACOBS^M

Sustainability Report 2009 We See Sustainability Differently



People | Environment | Growth No Boundaries

Letter from the President & Chief Executive Officer



Welcome to Jacobs' Sustainability Report.

We define sustainable development as the delivery of competitively priced goods and services that satisfy human needs and bring quality of life. Ecological impacts and resource intensity are progressively and cost-effectively reduced throughout the life cycle of those goods and services, thereby ensuring future generations' ability to do the same.

What does this really mean?

It means that you see our philosophy in action, because we see sustainability differently. You feel the benefits that our approach reaps at all levels and dimensions. Sustainability is ingrained in our projects and business practices as well as in our people and our culture. Our philosophy about sustainability manifests in our core values:

- People are our greatest asset,
- We are a relationship-based company, and
- Growth is an imperative.

Through these core values our commitment to sustainable development is made real for Jacobs employees, Jacobs clients, and Jacobs shareholders.

Within the pages of this report, we share detailed evidence of our ongoing commitment to sustainable development. From successful projects to innovative processes, we seize the opportunity to help our clients find the best solutions for their projects while being responsible stewards of the natural world, today and in the future.

Our own sustainability efforts are highlighted as well. Whether it is minimizing our power consumption, reducing our dependence on paper, or emphasizing the use of public transportation instead of personal vehicles, we are growing more sustainable every day.

In seeing sustainability differently, we envision the infinite possibilities that keep all of us moving toward a safe and sustainable future.

Craig Martin
President and CEO

Preface



At Jacobs we are continually working to design and construct a safer and more sustainable environment for our clients, employees, and colleagues. We focus on operationally sound business practices, the well-being of employees, and the well-being of our planet. And when we focus, we really focus.

Jacobs is not a company that takes commitment lightly. We are authentic in all that we do. So rather than hop on a bandwagon, we take the time to make sure it makes sense for the whole company. That is why the ongoing advancement of sustainable services is so important to us. Jacobs has been offering sustainable services for years. Sustainability is embedded in our culture and clearly demonstrated through our core values. So while this first sustainability report is an exciting step in Jacobs' commitment to sustainable development, it is a continuation of a journey we began a long time ago.

Sustainability is inextricably linked to Jacobs' Health, Safety, and Environment (HSE) program, which serves to drive zero incidents through Jacobs' business practices and creates a culture of caring. HSE practices by their very nature lend themselves to sustainability. The health and safety of our employees and clients ensure the health of our company. Protecting the natural environment serves to provide a healthier and safer workplace for employees and clients. Taking a sustainable view of HSE allows us a broader view of the environment – it creates a bigger picture that goes beyond compliance and mandates and furthers our efforts to be responsible stewards of the natural world.

When we see sustainability through the framework of our core values and emphasize our commitment to HSE, there are no limits to what we can accomplish.

Robert Norfleet

Senior Vice President, Quality, HSE & Alliances

About Us

Jacobs is one of the world's largest and most diverse providers of professional technical services. With annual revenues exceeding \$12 billion, we offer full-spectrum support to industrial, commercial, and government clients across multiple markets. Our services include scientific and specialty consulting as well as all aspects of engineering and construction, and operations and maintenance.

Our global network includes more than 160 offices in more than 20 countries. We have operations in the Americas, the United Kingdom, Europe, India, Australia, and Asia. Our headquarters are in Pasadena, Calif.

We have more than 60 years in the industry, and have built our success on strong, long-term client relationships.



People | Environment | Growth

5	We See	Sustainability	Differently
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- On the Outside: Sustainable Services for Clients
- On the Inside: Jacobs' Sustainable Culture
- Our Sustainable Future



We See Sustainability Differently

Sustainable Development is the delivery of competitively priced goods and services that satisfy human needs and bring quality of life. Ecological impacts and resource intensity are progressively and cost-effectively reduced throughout the life cycle of those goods and services, thereby ensuring future generations' ability to do the same.

While this is an inclusive and relevant definition of sustainable development, at Jacobs we believe there's a little more to it.

We see sustainability differently.

To us, sustainable development is more than a current hot trend – more than simply being green. It surpasses policy and procedure and is bigger than the supervisory role of an individual department. At Jacobs, sustainable development is evident across all market sectors of our business and is woven into the fabric of our culture. In short, sustainability is part of who we are.

In the following pages, we describe our overall philosophy of sustainability and how we practice sustainability – both outside the company for our clients and inside the company for ourselves. We conclude with a look into the future.



Circles of Influence: People, Environment, and Growth

We understand that sustainable development decisions are driven by three overlapping and interacting segments that are at the core of sustainability:

People

Environment

Growth

No Boundaries

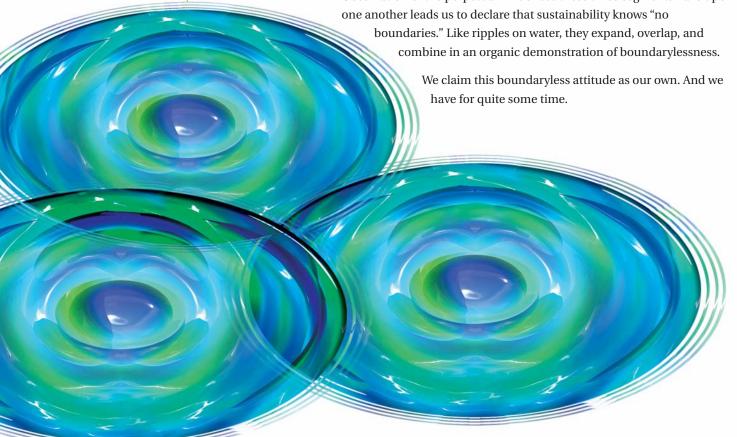
The human side of the equation (social factors).

Our relationship with the natural world that surrounds us (ecological factors).

The drive to improve and refine (economic factors).

These three drivers are often called the "triple bottom line" when translated into business metrics.

Observation of the perpetual influences these three segments have upon one another leads us to declare that sustainability knows "no





Sustainability: We Grew Up with It

At Jacobs we embrace a "boundaryless" point-of-view. It is no coincidence that our core values align with these same three sustainable motivators - people, environment, and growth. Sustainability has been part of our company culture for decades and is clearly demonstrated through our three core values:

People Greatest Asset

This is the human side of our company. Our people are our most valued asset. As engineers, architects, scientists, planners, builders, and more, we provide a core foundation for our commitment to sustainable development. Our people are experts in the delivery of sustainable development services. We come from diverse backgrounds, speak various languages, and live in geographies around the world. We are residents of New York, Paris, London, Dubai, Shanghai, and beyond, and exemplify the way we transcend boundaries.

We are a Relationship-Company

The way we interact with others and our surroundings is paramount. Jacobs is committed to building deep, lasting relationships with our customers. We are dedicated to making meaningful, long-term improvements to the sustainability of our world on behalf of our clients. This is one of the most rewarding aspects of our work, and where we make our biggest contribution to sustainability. We deliver the tangible, technical solutions that really make a difference to our clients' social, economic, and environmental goals, resulting in a solid triple bottom line.

Growth **Imperative**

We are driven to excel. At Jacobs we have a responsibility to our investors, our clients, and our employees to grow our profit by 15 percent year after year – every year. Our passion for sustainable development helps us keep that promise. Taking sustainable actions within our company, such as reducing consumption and improving efficiency, directly results in lowering costs and increasing profitability. Such laser focus on our own costs allows us to offer competitively priced services. Better yet, our cost consciousness is embedded in our operational standards and extends to our commitment to always look for opportunities to save money for our clients, too.

Because of our core values, our commitment to providing our clients with services that address their triple bottom line (social, economic, and environmental goals), makes us an attractive service provider and leads to more growth opportunities for us and for our clients.

Together, these three core values drive our leadership, business practices, and culture. They also form the solid base for our commitment to sustainable development and support our pursuit of ongoing growth.

And, like the three sustainable motivators - people, environment, and growth - our core values intersect and permeate everything we do. Boundarylessness is evident throughout Jacobs.



Our Seven Principles of Sustainability

With boundarylessness as our inspiration, we have adopted seven principles to guide us in our ongoing pursuit of sustainability:

- Sustainable development is a corporate priority

 Our core values exemplify our commitment to sustainable development. Our policies, programs, and practices comply with laws, regulations, and good practices of sustainable development.
- We seek broad, deep capabilities and services
 We seek to offer best-in-class capabilities in all aspects of sustainable development. We learn from ongoing research and study industry developments. And, we benefit from opportunities to share best practices internally and with clients.
- Sustainable development is integrated into our business
 We integrate appropriate sustainable development practices, including continuous performance improvement processes, into our work processes and programs.
- We strive to broaden our sustainable influence
 We train and educate employees on current principles, technologies,
 and best practices that support sustainability. We seek to advise and
 educate customers on their best options.
- Our facilities and operations follow sustainable principles
 We apply economically sound sustainable development principles to
 our business and seek to maximize energy efficiency, use renewable
 resources, and minimize waste. Our activities are undertaken with
 a commitment to prevent serious or irreversible impacts on our
 environment.
- We encourage others toward sustainable development
 We encourage our supply-chain partners to adopt similar sustainable
 principles and improvements. We foster the transfer of knowledge,
 support the dissemination of best practices in public forums, and
 provide policy advice to governments and non-governmental
 organizations.
- We are open and transparent, responding to concerns as they arise
 Transparency is critical to running an ethical business. We foster
 dialogue on issues of sustainable development and are responsive to
 concerns raised about our practices. We measure our performance,
 present a periodic progress report to our Board of Directors, and
 provide annual reporting as part of our public disclosure.



The following information illustrates a selection of our sustainable development services. To see the services in action, review the project summaries on the following pages where we have profiled some of our more recent, significant sustainable projects.

Carbon

Sustainable Services

BREEAM / LEED CEEQUAL Master planning Sustainability assessments Life cycle reviews Energy efficiencies

Materials selection

Sustainable design

Commissioning

(incl. carbon)

EPCM

Responsibility Verification Auditing Management systems Waste minimization

Corporate

Management Carbon footprinting and accounting Sustainable energy auditing Carbon strategy development Low and zero carbon technology GHG certification and compliance

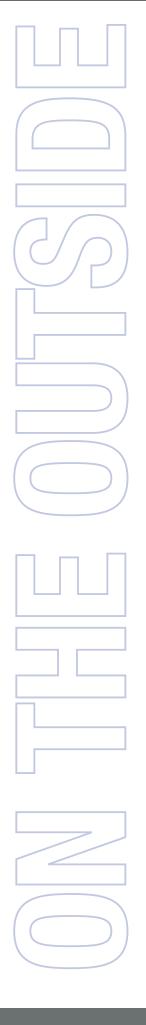
Public Sector Strategy and policy SD assessments Environmental impact studies Reporting and measurement Procurement Community / stakeholder consultation

Climate Change Reporting Design impacts on developments Planning Risk assessments Adaptation advice Scenario planning

Jacobs is steeped in a culture grounded on sustainability, inspired by the influences of a boundaryless worldview, and guided by our seven principles of sustainability. We are committed to helping solve our clients' toughest challenges while building a stronger company and creating a brighter future for our employees, our families, and our communities.

Our beliefs afford us a unique vantage point – one that we believe is refreshingly different. And we anticipate this difference is as exciting to our clients, new employees, investors, and partners as it is to us.

At Jacobs,
We See Sustainability Differently.



On the Outside: Sustainable Services for Clients

Approaching sustainability from our unique vantage point and applying our core values, we can implement sustainable service offerings across varied market sectors and geographies.

Today's tools and technologies enable our planners, engineers, architects, builders, and scientists to not only be more efficient in how we deliver our services, but also to ensure that we provide the best solutions to meet our clients' project goals. If we discover that an appropriate tool or methodology does not exist, we create one to support our sustainable solutions.

We consider all of this an integral part of bringing added value to our clients, which we strive to do with every project, large or small, all around the world.



Tools We Use

Throughout the prototypical project life cycle of plan, design, build, and operate, we use an assortment of methodologies, tools, and technologies to deliver solutions that positively affect our clients' sustainability goals (their triple bottom line) and the planet. The following pages detail our overarching project development methodologies, as well as provide a few examples of the types of tools we use to support each phase of the project life cycle.

- 1. Planning
- 2. Design & Building
- 3. Operating
- 4. Results



Project: Stennis Space Center (SSC) Client: NASA Location: Southern Mississippi

acobs Technology Inc. (JTI) provides design and construction management services to NASA at Stennis Space Center (SSC) in Southern Mississippi. JTI utilizes high-performance and sustainable design and construction concepts, including waterless urinals, permeable paving surfaces in parking lots; solar exterior LED lighting, and

regional and recycled building materials.

JTI also is investigating the use of alternative energy sources such as solar, wind, and biomass.

JTI is supporting the design and construction of two LEED Silver projects at SSC. The Emergency Operations Center (EOC) will merge the facilities of SSC's medical, security and fire protection services under one roof. Construction of the EOC is approximately 95 percent complete, and the project is seeking 40 LEED points.

The Cryogenic Control Center is a 3,550-square-foot building that will house the controls for cryogenic barges used to feed fuel into the rocket engine test stands at SSC. Because of the critical nature of the work, and because of its industrial function, the

Cryogenic Control Center posed some stiff design challenges. In particular, the facility's function as a high-energy-demand industrial work space means energy conservation is a particular challenge, which will be met with precast wall systems with foam insulation and the exclusion of interior drywall. JTI segregated the shop area from the computer control center and office space, and strategically sited the building to lessen the impact of any potential explosions.

JTI also used numerous sustainable design concepts, including low-flow toilet fixtures, energy-efficient lighting, green power sources, water-efficient landscaping and more in rehabilitating an abandoned warehouse into a new Records Retention Center, which is planned to open in Spring of 2010.

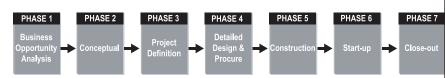


Overarching Project Delivery and **Methodology: Two Recipes**

Two systems interact with projects at each stage of their life cycle: JSTEPS (Jacobs System to Ensure Project Success) and Jacobs' Sustainable Development Methodology. They act as recipes for sustainable project delivery success.

JSTEPS: Recipe for Repeatability

The pursuit of sustainable development drives us to



continually improve our efficiency – and a major enabler of that improvement is the ability to provide repeatable, predictable results. Repeatable service delivery is instrumental in achieving on-time and on-budget project delivery, which, in turn, produces successful projects and strengthens client relationships. Client satisfaction results in repeat business – 90 percent of our work is repeat business – allowing the cycle to continue. The Jacobs system that provides the recipe for repeatability is JSTEPS.

In 2000, we implemented the JSTEPS methodology and project delivery system to support our own growth objectives along with those of our clients. Because JSTEPS was developed with the understanding that every client has unique needs, it has proven to be a flexible delivery system and has evolved into a methodology that can be customized to meet the needs of nearly every industry we serve.

Jacobs' Sustainable Development Methodology Define the need Sustainability project assessment **Options appraisal** PLAN Sustainability brief development 5. Implementation into design 6. **DESIGN** Measure progress Sustainability performance indicators 8. Sustainable construction (typical building project) 9. Handover and commissioning **BUILD** 10. **Defects and performance** 11. Operation - feedback to design 12. Refurbishment **OPERATE 13**. **Deconstruction and re-use**

Jacobs' 13-Step Sustainable Development Methodology: Recipe for Practical Sustainable Solutions

Along with the predictability and repeatability JSTEPS allows us, our clients also look for guidance and articulation of the sustainable elements in their projects, and seek assistance in creating a strategy to meet their goals. And because we believe every project has sustainable opportunities, we can help clients recognize and achieve specific sustainable goals even though one may not be immediately identified for the project.

Jacobs' 13-Step Sustainable Development
Methodology crosses the varied market sectors
where our clients operate and serves as a
roadmap to practical sustainable solutions for
their specific project or program. The 13-step
process was designed to build in sustainable
thinking at the earliest stages and then to track
sustainability through the life cycle of the
project. While the process is most often applied
to building projects, it is available to serve as a
guide for projects across all of our market setors.



Definition:

A charrette is a collaborative session intended to draft a solution to a design problem that meets the interests and needs of a varied group of people. The structure of a charrette may vary depending on the design issue and the individuals in the group.

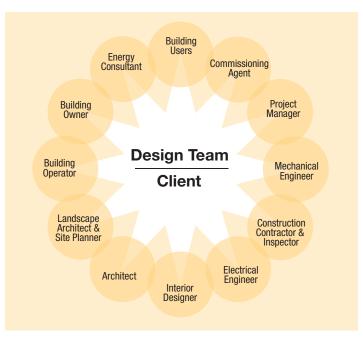
Planning

Eco-charrette

Helping clients identify sustainable development goals can be as complex as the project itself. To complement our 13-Step Sustainable Development Methodology, we often leverage our highperformance eco-charrette to help clients create a vision for a project, establish an all-inclusive project team, and outline important first steps toward sustainable design.

Using the same format as a typical charrette - an intensive workshop setting in which various stakeholders and experts are brought together to address a particular design issue - the eco-charrette focuses its subject matter intently on the ecological principles of the project, rather than the programming.

For example, during an eco-charrette for a U.S. building project, the participants identify USGBC LEED strategies to explore during the building process and consider how building design and interior function can affect the building's overall environmental impact. Building design decisions address site, energy consumption, human comfort, building material, and landscaping issues. Sustainable design integrates these factors to achieve minimum impact on the environment.



For all types of facilities, our eco-charrette process incorporates the entire design team from the very early planning stages.



Project: Northern Arizona University College of Business Administration Client: Northern Arizona University Location: Flagstaff, Arizona

acobs provided complete programming and architectural design services for this 112,000-square-foot, four-story "signature gateway" building located at the entrance to the south campus of Northern Arizona University in Flagstaff, Ariz. Transparency, natural ventilation and daylight, flexibility, and sustainability were key design drivers for the project. Using state-of-the-art technology in adaptive comfort for mechanical cooling and

heating systems, access flooring was utilized throughout the building for plug-and-play connectivity and under-floor air distribution. The building was designed to exceed ASHRAE standards by 20 percent with a projected energy saving of \$1 million within 20 operating years. The building also received a LEED GOLD certification and was awarded the 2006 AIA APS Energy Award for its energy-efficient design.

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To demonstrate the U.S. Army Corps of Engineers' commitment to sustainable design, the new facilities for the Everett Armed Forces Reserve Center will use the USGBC's LEED Green Building Rating System as a design guide and measure for achievement.

Designing and Building

Building Information Modeling (BIM)

BIM uses computer simulation to virtually model all physical and functional characteristics of a facility from concept inception to operation. The models provide insight into understanding the trade-offs associated with design decisions and how and where sustainable elements can save time and money.

Jacobs has been a trailblazer in the adoption of BIM within the architecture, engineering, and construction community and engaged as a beta-site during the early 1990s. Since March 2005, Jacobs maximizes the use of BIM on all building design projects.

BIM's Role in Sustainability

BIM is used to facilitate the complex processes and analyses associated with building performance analysis and evaluation. We create models to predict building performance and can include facility sustainability analysis (LEED), mechanical simulation and analysis, daylighting, energy performance, and life cycle assessment. Linking BIM to analysis tools can provide immediate feedback for alternate design options. For example, based upon analysis, buildings can be re-sized and re-oriented to make better use of solar and site characteristics.



Some other significant sustainable-related functions of BIM include:

- Calculate percentage of material re-use, recycling, or salvage
- Daylight studies to analyze heat gain, shadows, and views
- Material properties and analysis of square footage of materials can be integrated with a photovoltaic study, and integrated with mechanical load calculations
- Recycled content, including steel (tonnage calculation) and concrete (cubic footage calculation), can be figured
- Tag items in the model that contain recycled content and contribute to LEED efforts



Project: Township 9 Client: Capital Station 65, LLC Location: Sacramento, California

ownship 9 is a mixed-use urban infill development built to human scale, and incorporating the principles of sustainability and intelligent growth. The \$1.7 billion transitoriented development is expected to revitalize the aging industrial River District of Sacramento, Calif. As planned, Township 9 will replace a series of blighted industrial buildings, and will offer a new generation of residents the features and amenities needed to live, work, and play in an in-town riverfront

neighborhood. Construction is currently under way.

Township 9 is part of a pilot program, Leadership in Energy and Environmental Design for Neighborhood Development (LEED ND), developed by the United States Green Building Council. When complete this program will advocate a new standard of development and planning high-density neighborhoods and mixed-use development.



Operating

Commissioning

The way in which a facility operates throughout its life cycle presents a significant opportunity to attain sustainable goals. Many of Jacobs' projects - refineries, manufacturing and chemical plants, central utility plants, schools, public buildings, and medical facilities - have high rates of utility and system usage and therefore benefit from commissioning efficiencies. Commissioning describes services designed to continually improve asset management and performance and plays an important role in sustainable design. While the industry originally viewed commissioning as a process which had an endpoint at substantial



completion of a project or warranty expiration, at Jacobs we recognize this process does not end with project completion, but rather continues as a bridge to permanent asset management – especially of environmental systems – in a very comprehensive manner.

At facilities we operate, our goal is a safe, solid, environmentally sound system that performs at the highest level throughout the life cycle of the building; our goal is to maintain performance that is within 98 percent of the original design performance level, even in the face of normal building system degradation. The typical scope of commissioning services for a facility includes heating, ventilation, and air conditioning; controls/automation, and steam and chilled water distribution systems, as well as the main electrical service.

At Jacobs commissioning goes beyond industrial facilities and buildings. Maintaining system performance of any asset contributes to increased energy efficiency over the life cycle of the asset and furthers the sustainable goals of our clients. This long-term vision ties in closely with our core value of nurturing strategic alliances and long-term relationships with our clients.



Project: The Art Institute of Chicago New Modern Wing Commissioning Services

Client: The Art Institute of Chicago Location: Chicago, Illinois

acobs is providing Leadership in Energy and Environmental Design (LEED) consulting and commissioning services for the new Modern Wing at the Art Institute of Chicago, which was designed by the famous architect Renzo Piano. This 264,000-squarefoot facility incorporates art display, storage and handling, as well as educational, office, boardroom, and public spaces. The art galleries and storage areas are designed based on very exacting environmental criteria with strict temperature, relative humidity, and carbon-filtration performance requirements.

The project scope includes significant utility-infrastructure upgrades. The commissioning scope includes all heating, ventilation, and air conditioning; controls/automation, and steam and chilled water distribution systems, as well as the main electrical service. Jacobs is providing LEED consulting services toward the objective of gaining LEED certification of the facility. Jacobs is also involved in monitoring building system performance, to ensure life cycle sustainability of the environmental systems in accordance with original design criteria.





Jacobs Comprimo® Sulfur Solutions

Our innovations in the recovery and removal of harmful sulfur from oil are a specific and significant example of our effort to find sustainable solutions for our clients in the heavy industrial and process markets.

Jacobs' Comprimo® Sulfur Solutions Group supplies the expertise, technology, and total project delivery for cost-effective sulfur recovery plants worldwide. As the global leader in sulfur recovery, our technologists find the optimal solution for our clients' sulfur challenge using open processes, our own proprietary SUPERCLAUS® and EUROCLAUS® technologies or those sub-licensed from others. Our offerings include all of the key processes to maximize "Sulfur Block" performance, including gas/liquid treating technologies, NH3 destruction, hydrocarbon destruction, O_2 enrichment, sulfur degassing, and sulfur handling.

Comprimo® in Action

Our Comprimo® Sulfur Solutions recently introduced and implemented its newly developed Advanced Burner Control+ System (ABC+) at a client site in North America. As a world's first, this control system uses an acid gas feed analyzer and a dynamic algorithm to control the combustion air to the reaction furnace. The analyzer measures H_2S , total hydrocarbons, CO_2 and H_2O accurately and quickly, which is key for achieving effective control.

ABC+ is our revolutionary development that benefits all Sulfur Recovery Units (SRUs) in gas plant, power plant, refinery, and heavy oil upgrader installations. Together with a longer sulfur plant catalyst life and reduced unscheduled downtime, ABC+ saves our clients money and helps protect the environment.

We have approximately 160 units of Superclaus® and Euroclaus® technologies in operation in the world. Each unit has the capacity to remove approximately 200 tons of sulfur a day from the environment which would result in the removal of 32,000 tons per day. At that rate, in 75 days we could remove enough sulfur from the environment to fill the Empire State Building in New York City.



Process Industries

Closed Relief System Projects: Relief systems are used in refineries and chemical plants to redirect fluids that are vented from equipment and piping during upset conditions to a safe location. In most cases, the vented fluids enter a closed relief system

which prevents the leakage of harmful emissions to the atmosphere; however, in some cases the emissions are vented to the atmosphere. The EPA has tightened the requirements on emissions that are eligible to be relieved to the atmosphere.

Jacobs has designed and constructed several closed relief system projects that eliminate the release of often harmful contaminants to the atmosphere. Not only does this offer more eco-friendly operations, but it also provides a safer operation for the employees working within the process facility.

Clean Diesel Projects: The EPA has strict fuel requirements which stem from the Federal

Clean Air Act. The EPA has set deadlines over a period of time for sulfur regulations requiring a 15 ppm maximum allowable sulfur content for diesel fuels used for on-and off-road vehicles, marine vessels, and locomotives.

Jacobs has executed and/or is currently executing approximately 30 hydrotreater projects within the United States. This roughly accounts for the processing and sulfur treating of over 500,000 barrels of clean diesel per day. The environmental advantages of burning clean diesel include the minimization of acid rain and the release of soot into the atmosphere.



Getting Results

On the previous pages we gave examples of just a few of the tools we use throughout the prototypical project life cycle to help clients achieve their sustainable goals. Through it all, we want to know how much of an impact our sustainable development efforts have had – both on the environment and on our clients' bottom lines. Measurement of the effects of our innovations and approaches is a top priority. Following are two examples of some of the myriad ways we track the impact of our sustainable efforts.

Jacobs Value+

Value Plus

Our Value Plus program is an outstanding example of a program that tracks innovative practices and ideas and then implements them in applicable situations, passing the value created (typically savings) and benefits on to our clients. The primary objective of Value Plus is to deliver, measure, and demonstrate value to our clients by increasing their return on investment.

In 2008, we saved an estimated \$2.6 billion that was passed on to our clients through our Value Plus program.

This program is a powerful competitive advantage for our business. It clearly illustrates our culture of going the extra mile for our clients, understanding the clients' businesses, and assuring their businesses are better for having worked with Jacobs.



Project: Blackfriars Station and Bridge 410 Roof Client: Network Rail Location: London, England

Image kindly provided by Network Rail.

acobs is serving as consultant for the detailed design stages of the redevelopment of Blackfriars Station and Bridge 410 Roof, which are part of the Thameslink Program. The Jacobs Sustainability Team coordinates all sustainability activity across the project and has developed a sustainability management plan that outlines the sustainable project objectives. This document details all of the environmental impacts and risks associated with the project from the design phase through potential construction impacts and operational phases.

In addition to environmental management,

the sustainability team has been involved in the incorporation of additional sustainable elements on the project, including: a feasibility study and evaluation of possible use of solar photovoltaic (PV) panels on the bridge roof, rainwater harvesting technology, a sustainable procurement checklist, regular sustainability workshops for project participants, and more. Jacobs and Network Rail are taking steps throughout the project that they hope will lead to achievement of an "Excellent" CEEQUAL rating for the Blackfriars Station project.

⁶⁶Network Rail has been impressed with the achievements made by the Jacobs Sustainability Team during the detailed design stage, Grip 5, for redevelopment of Blackfriars Station and Bridge 410 roof. The team has facilitated regular sustainability meetings between clients and contractors, and consistently driven the design and construction towards a CEEQUAL 'Excellent' Award. It is clear that the integration of the team alongside the Jacobs Civil, M&E and Architectural departments has fostered excellent communication and allowed for opportunities to incorporate sustainable concepts to be recognised wherever possible ⁷⁹. – Network Rail



We were aware that the carbon footprint from our construction activities, and therefore the potential for carbon reduction, would be significant, but we had no information on this. We presented the idea of a tool that measured the carbon footprint of a project to Jacobs. The Jacobs team worked closely with us and developed a tool that addressed our key requirements of being user friendly while providing meaningful information for project engineers.

Andrew Powell Environmental Technical Advisor, **Environment Agency**

Carbon Calculator

An example of an innovative tool that has had a big impact on reducing emissions in a short time is the Carbon Calculator, which we developed as a result of a specific request from the Environment Agency (EA) in the United Kingdom.

The EA, the key environmental regulator in England and Wales, needed a tool that could measure carbon generated in various aspects of construction, including material choice and mode of transportation to the site, as well as measurement of the carbon impact of construction plants. The EA commissioned Jacobs to develop a Carbon Calculator tool to support sustainability decisions for its flood-risk construction work.

Award-Winning Carbon Calculator

The Environment Agency was so pleased with the Carbon Calculator that the tool was awarded the EA 2008 Excellence Award for Innovation.

The Carbon Calculator calculates the embodied carbon dioxide of materials plus CO₂ associated with transportation of those materials. The calculator also factors in personal travel, site energy, and waste management. For the EA, the tool will help assess and compare the sustainability of different designs in terms of CO₂.

The EA was so pleased with the Carbon Calculator, the tool was made available on the EA's external web site. Additional construction clients, contractors, and consultants can make use of the Carbon Calculator when assessing their own activities.

We are currently adapting the Carbon Calculator methodology to be applicable in other industries such as water and transportation, and have additional carbon reduction tools in development.

At Jacobs we are constantly seeking innovations that result in improved efficiencies, reduced consumptions, and, ultimately, cost savings for our clients. We seek feedback from our staff and our clients to ensure that the best solutions are being met and the best projects delivered.

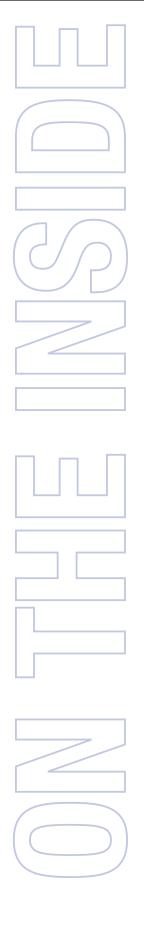
It's all part of how we see sustainability. We operate as a company unified by a boundaryless worldview. Through it all, regardless of market sector or geography, sustainability is not only core to who we are as a relationship-based company, but also simply part of our service.



Project: New Bedford Harbor Superfund Site Services Client: U.S. Army Corps of Engineers - New **England District** Location: New Bedford, Massachusetts

he New Bedford Harbor project is one of the largest PCB-contaminated sediment dredging projects in the U.S. The Jacobs-led New Bedford team has implemented a dredging strategy that removes the PCBcontaminated sediments while preserving the fragile ecological systems found in the estuary. Since dredging began in 2004, we have removed approximately 90,000 cubic yards of PCB-contaminated sediment. Jacobs has also performed mercury collection, disposal/recycling, and spill clean-up at this former Aerovox facility.

An added benefit of the project came about during the Jacobs team's initial review of the existing guidance documents that involved the new infrastructure envisioned by the previous contractor. Following our review, we identified and documented a cost avoidance of \$4 million for the program even before the initial mobilization. This savings was accomplished by consolidating treatment operations in a single building rather than constructing a second treatment building and mile-long pipeline, as proposed by the preexisting plan.



On the Inside: Jacobs' Sustainable Culture

Guided by our seven principles of sustainability and inspired by our philosophy of boundarylessness, sustainable efforts within Jacobs are undertaken with the same spirit of sustainability with which we serve our clients.

Through numerous Jacobs programs, we are taking steps globally and locally to further our own sustainable efforts. The following examples demonstrate not only our passion for sustainability, but also our sense of accountability as we take action to meet our ongoing goals of minimizing waste, improving efficiencies, and more.



In the People Business

At Jacobs, our people are everything. To capture the importance we place on each individual team member, we've adopted "We want you to be you" as our employee messaging. This theme emphasizes that we are all unique, yet unified together as part of a single, global team. Human Resource programs such as benefits and continuing education are structured to support the employees and assist them in achieving their potential within the company.

We are committed to hiring unique and talented individuals, and encouraging their growth and development as employees and as people. We nurture diversity, because through diversity of opinion, experience, and culture, we remain open to all possibilities.

Our recruiting campaign, "We Want You to be You"- or "We Want U 2B U" illustrates our commitment to employees' individuality and growth.











Project: South East Water Carbon Estimates

Client: South East Water Location: United Kingdom

acobs was commissioned to prepare carbon estimates for South East Water's (SEW) proposed investment in the years 2010 - 2015. SEW provides water for two million people on a block just south of London to the south coast. Jacobs began the project by compiling an annual return account of SEW's operating emissions. Over 90 percent of the company's emissions relate to electricity consumption for pumping and treating the water. The main question to be addressed became, considering the life cycle carbon impact, when is it better to change out an old pump for a new one of greater efficiency?

The major challenge was to account for the embodied carbon in the materials used in the asset management and investment program. Various levels of analysis were used to give a complete and transparent estimate of the carbon footprint of the program, in terms of both capital and operational carbon. Relatively detailed accounts could be made for dams, boreholes and pipelines, and less detailed for mechanical and electrical plant. SEW is using the figures to develop a carbon mitigation program driven by their Energy Efficiency Manager, Kevin Clark, to analyze energy expenditure to reduce emissions.



BeyondZero®

At Jacobs we are dedicated to keeping our employees safe, healthy, and working toward bright futures. BeyondZero®, the name of our program to promote a culture of caring, moves far beyond efforts to have an Incident and Injury-Free® (IIF) safety performance. It is something deeper, something embedded in our culture. Not many companies implement a true culture of caring where concern for employees' health, safety, and happiness extends outside the office walls, beyond the project site fence into our homes, our cars, and all the places we interact with family and fellow employees.

The BeyondZero® culture of caring is about the safekeeping of our employees, their families, our clients, and our communities. Through our leadership in sustainability we reinforce this culture in everything we do.

BeyondZero® was the impetus for our "Safekeeping" campaign, an internal campaign that illustrates the way we view safety as a literal lifestyle, and a 24-7 mindset that is second nature.













Project: Diesel Village and Showroom and Commercial Offices

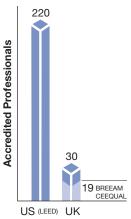
Client: Diesel

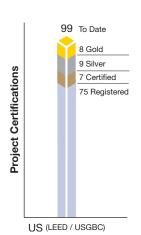
Location: Vicenza and Milan, Italy

or the international fashion and lifestyle brand Diesel, Jacobs is serving as designer and project and construction manager on two major investments-"Diesel Village," its new world headquarters under construction near Vicenza in Italy and the recently completed showroom and commercial offices in Milan. Along with Diesel's Creative

Team, we produced a design that satisfies innovative criteria for eco-sustainability and high energy-efficient buildings, while using our project management skills to successfully drive the schedule for on-time completion.







Professional Development, Continuing Education, and Accreditations

At Jacobs we encourage the ongoing professional development of our employees, and offer tuition reimbursement to employees to further their education in their specific fields. In addition to the benefits of personal and professional achievement, well-educated employees armed with the latest industry knowledge provide the best possible service to our clients, resulting in strong client relationships and successful projects.

In the United States, we have over 220 Leadership in Energy and Environmental Design (LEED®) Accredited professionals on staff. In the United Kingdom, more than 30 employees have direct sustainability assessment capabilities. Nineteen of these are registered assessors in Building Research Establishment's Environmental Assessment Method (BREEAM) or its civil engineering equivalent, Civil Engineering Environmental Quality Assessment and Award Scheme (CEEQUAL). These numbers are constantly growing as new employees join the firm and more people become accredited.

To date our employees have supported our clients' efforts to achieve 24 LEED United States Green Building Council (USGBC) Certified projects nine Silver, eight Gold, seven Certified - and more than 75 LEED USGBC Registered projects.



Project: White Sands Test Facility (WSTF) Client: NASA Location: Las Cruces. New Mexico

s part of the Jacobs Technology Inc. (JTI) test and evaluation contract at NASA's White Sands Test Facility (WSTF), near Las Cruces, N.M., we are helping develop new rocket propulsion systems that

utilize green (non-toxic) propellants. These new reaction control engines use liquid oxygen (LOX) and liquid methane (LCH4) as propellants tested in altitude simulation chambers. These tests demonstrate the engines' operability at low pressures to effectively expose any uncertainty of reliable ignition during single and multiple engine pulse tests.

For future human spaceflight vehicles, liquid oxygen and liquid methane propulsion systems offer savings in safety, performance, and cost compared to hypergolic propellants. For example, the hypergolic propellants, monomethyl hydrazine (MMH) / and nitrogen tetroxide (NTO), which have been used in the United States human space program propulsion systems, are known toxic substances. MMH and NTO not only introduce ground handling safety risk and necessary

complexity, but also the toxic propellants introduce crew risks.

To demonstrate this capability NASA arranged an agreement with Pratt and Whitney Rocketdyne to test an Apollo-era Lunar Excursion Module (LEM) RS-18 ascent engine using LOX/LCH4. The original engine utilized hypergolic propellants and was chosen as a pathfinder that would provide a design point for future testing.

Another reason to pursue the development of LOX/Methane propulsion systems is the potential for in-situ resource utilization during Mars and lunar missions. Oxygen should be harvestable from the lunar and Martian soils, and methane can be obtained from the Martian atmosphere. In-situ propellant generation reduces vehicle mass requirements to the surface.

Noel Watson, Jacobs' Chairman of the Board, seen sitting at far left in this photo, has been teaching at Jacobs College since its inception in 1993.

Jacobs College

Established in 1993, Jacobs College provides targeted leadership and management development. By educating our employees and enhancing their leadership and managerial skills, we enable them to represent our company in the best way possible.



The goals of Jacobs College are to:

- · Improve leadership talent
- Share our organization's culture and success
- Institutionalize success by passing on lessons learned
- Increase our ability to provide greater value to our clients.

Jacobs College participants are immersed in a learning atmosphere that leads to a better understanding of our core values, which improves their ability to serve our clients, and train and lead others. Through a deeper understanding of our core values, these employees perpetuate our commitment to sustainable development.



Project: University of Texas at Austin Client: University of Texas Location: Austin, Texas

acobs has been working with the University of Texas at Austin (UT) to optimize energy efficiency since 1998. The campus has grown rapidly over the last 11 years expanding usable square footage at the main campus by over 16 percent - and heating and cooling demands have risen accordingly. Jacobs has helped the University reduce costs and emissions through efficiency gains in the power plant, steam generation, chilled water production, energy distribution, and through demand-side energy reductions.

Through plant modifications and process optimization Jacobs has helped UT increase its power plant efficiency to 73 percent through 2008, up from 62 percent in 1996. The efficiency gains have allowed the campus to continue growing in size and energy consumption without emitting any additional carbon dioxide, effectively classifying all campus growth as carbon-neutral. Boiler upgrades have reduced annual nitrous oxide (NOx) levels by 35 percent. Specific campus improvements include:

Demand-Side Energy Master Plan: Jacobs is developing and implementing a comprehensive Demand-Side Energy Master Plan for the 140 building, 15 million-square-foot campus. The program is designed to provide a minimum 20 percent reduction in annual utility and operational costs. The \$16.6 million project has savings of \$3.3 million annually and a 5-year simple payback.

Installation of the 25 Megawatt Steam Turbine Generator: Jacobs conducted a comprehensive feasibility study and subsequent design for the installation of a new 25 megawatt steam turbine at the Hal C. Weaver Power Plant. Total annual steam/fuel savings was approximately \$1 million.

Steam Turbine Bypass: Jacobs provided all the necessary engineering and design for the new Steam Turbine Bypass. This project will save UT more than \$500,000 per year in natural gas savings by allowing two steam turbine generators (in stand-by mode) to be shut down.

Future plans: A new 34 megawatt gas turbine, planned to come on line in 2010, will further reduce the natural gas demands in spite of ever growing campus energy needs. Combined with other future improvements, the natural gas needs of the power plant will decrease. In the next three years, these efficiency improvements will save over \$18 million in fuel costs. Similar savings are present with greenhouse gas emissions, where carbon emissions over the next three years are predicted to be reduced by 116,000 tons.



An Environment for Relationships

Because one of Jacobs' core values is being a relationship-based company, we foster an environment that encourages development of professional relationships within the company, with clients, and with colleagues. Part of our responsibility to continually strengthen our client relationships is sharing our knowledge with them and others. We encourage our employees and leaders to present papers and to be published regarding issues that surround sustainable development.

Below is a very small sampling of employee papers and presentations from the past few months:

- "Campus Energy System's Contribution to Greenhouse Gas Reduction Strategies for the University of Texas," by Scott Clark (Fort Worth, Texas, USA) at the International District Energy Association, Campus Conference in Chapel Hill, North Carolina; February, 2009.
- Presentation to Construction Users Roundtable about sustainability opportunities within the construction industry by Jacobs President and CEO Craig Martin (Pasadena, California, USA); November, 2008.
- "Managing Flood Risk through Adaptation to Climate Change The UK Approach" by Terry Fuller (Croydon, England, UK) at the International Conference on Climate Change and Adaptation in Chongqing, China; November, 2008.
- "Calculation of Greenhouse Gas Emissions" by Mike Bradford, Lan Cheah (Houston, Texas, USA) and Bill Keesom (Chicago, Ill., USA) at the American Institute of Chemical Engineers Annual Meeting in Philadelphia, Pennsylvania; November, 2008.
- "Review of Greenhouse Gases and Carbon Trading" by Steve Dowe (Greenville, S.C., USA) and Mike Bradford (Houston, Texas, USA) at the Technical Association of the Pulp and Paper Industry Conference in Portland, Oregon; August 2008.
- "Combined Heat and Composting" by David Notton (Cardiff, UK) at the Organic Waste Recycling Conference in Wageningen, The Netherlands; October 2008.



Project: Dounreay Nuclear Plant Client: Dounreay Site Restoration Limited (part of the United Kingdom Atomic Energy Authority) Location: Scotland

t the Dounreay Nuclear Plant on the northern coast of Scotland, Jacobs is assisting Dounreay Site Restoration Limited (part of the United Kingdom Atomic Energy Authority) to isolate a historic licensed Intermediate-Level Waste (ILW) disposal facility from the surrounding bedrock as part of the country's largest nuclear clean-up and

demolition project. Our waste minimization strategy and other work directly contributed to the project receiving the 2008 Directors Annual Safety, Health and Environment (SHE) Award for "Best Overall Team Contribution to SHE Improvements."



Jacobs also participates or has memberships in organizations that are committed to sustainability and sustainable development. A few are noted below:

- Corporate member of the United States Green Building Council (USGBC).
- Co-sponsor of The Climate Registry's Denver Regional Policy Forum, held in Denver, Colo., in February 2009.
- Member of the Solar Energy Industries Associations (SEIA).
- Part of the American National Standards Institute (ANSI) pilot accreditation program for bodies engaged in the reduction and removal of greenhouse gases.
- Corporate Member of the British Geotechnical Association (BGA), which is administered by the Institution of Civil Engineers (ICE), London.
- Member of the United Kingdom's Association of Geotechnical and Geoenvironmental Specialists (AGS).
- Member of AGS Hong Kong, a sister organization to the UK's AGS.
- Jacobs' project Township 9, an urban infill project in Sacramento, Calif., is part of the U.S. Green Building Council's Leadership in Energy and Environmental Design for Neighborhood Development (LEED ND) Pilot Program. LEED ND is a collaboration among USGBC, the Congress for the New Urbanism, and the Natural Resources Defense Council, and is the first national system for neighborhood design.



Project: GreenGuide for **Embassy & Consulate Operations** Client: U.S. Department of State Location: Worldwide

acobs was commissioned by the United States Department of State to develop the GreenGuide for Embassy & Consulate Operations to address energy and sustainability challenges at all overseas facilities. The GreenGuide provides both a world context for global challenges such as greenhouse gas emissions, as well as missionspecific tips for systems such as lighting, irrigation and more. The completed Green-Guide was distributed worldwide to all

Department of State embassies and consulates.

Jacobs created the content of the Green-Guide in conjunction with the Department of State's Bureau of Overseas Buildings Operations and the sustainability consultant Kath Williams + Associates. The graphic design, including the creation of the specialized logos, is by Jacobs.





A Relationship with the Environment

The combination of our relationship-based stewardship of our natural world and our drive for growth has led us to develop a strong reputation as a company with solid business practices that continually drive efficiency and reduce costs. Not only does our operating model and consistent drive to keep costs down reduce expenses and consumables, but they also ensure that we always provide client and shareholder value.

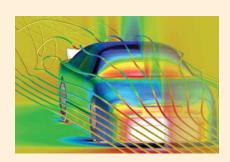
Adherence to our core values requires us to be accountable and to take action to minimize waste, improve the efficiencies of the buildings we inhabit, and be conscious of the travel plans we make. There are numerous examples of where we are taking steps, globally and locally, to further our sustainable commitments. Some examples include:

Annual Savings Print Reduction			
Pilot: United Kingdom	Estimated: North America	Total	
x 300	x 1,000	x 1,300	
20 Tons	65 Tons	85 Tons	
CO ₂ 60,000 lbs	200,000 lbs	260,000 lbs	
USD 1.1 Million	7.5 Million	8.6 Million	

Print (Paper) Reduction

Jacobs' Information Technology Team is working to improve the overall cost and sustainability of our print facilities. Initial efforts are being made through the introduction of several pilot schemes in the UK. Through wider adoption of duplex printing, removal of personal printers, multifunction-device deployment and outsourced printing measures these pilot programs have delivered \$1.1M in annual savings to date with an estimated \$1.5M to follow for the remaining UK sites.

Environmental improvements through these initiatives have resulted in saving the equivalent of 300 trees, 20 tons of paper and a net reduction of 60,000 pounds of greenhouse gases. Similar analysis and adoption of these measures in our United States and Canada offices have the potential to save Jacobs an additional \$7.5M annually. This equates to an additional net total of 1,000 trees, 65 tons of paper and CO2 reduction of nearly 200,000 pounds. In parallel, Jacobs' Information Technology Team will negotiate a range of national and international print agreements that allows each office to take advantage of additional savings through volume pricing on lease, hardware, consumables, and service.



Automotive Industry

ey sustainable services in the Automotive Industry include alternative fuels, hybrid and electric vehicles, aerodynamics, automotive safety, emissions testing, and powertrain development. Significant work in the field includes testing several experimental hydrogen-powered vehicles (the precursors to complete fuel cell-powered vehicles), aerodynamic testing to determine how force and drag relate to fuel economy, and design and construction of emissions facilities and support systems to provide our customers with

the capability to meet California Air Resources Board (CARB), European Union, and Japanese Central Environmental Council emissions-testing regulations.

Jacobs worked with Ford to increase Ford's Corporate Average Fuel Economy standards. We also worked with Ford to develop and execute test plans and analyze data on the Ford Hybrid Escape, allowing the vehicle to be released on time, under budget, and with a record-setting fuel economy for its vehicle class.



Personal Computer (PC) Power Management

This sustainable initiative to reduce power consumption began on a local scale in the Cork office in Ireland and involves power management of all PCs. The program has been adapted somewhat depending on location needs and is in process of being rolled out to offices throughout the Europe, the Middle East, Asia, and the United States. Almost half of our file servers have been virtualized, resulting in significant energy savings. We are tracking the results of this relatively new program and while we don't have exact numbers to report at this time, we expect the benefits to be substantial. Updated information and metrics on this program will be reported in a future sustainability report.

Environmental Management Systems (EMS)

In accordance with the requirements of ISO 14001, our UK offices have implemented an Environmental Management System (EMS) via two key procedures; MSP 09 Office Environmental Management and MSP 10 Project Environmental Management. Each office has developed an Office Environmental Action Plan detailing methods of compliance with company environmental objectives and targets. In general, provisions must be made for complying with legislation, reducing energy consumption, reducing paper and ink costs, and minimizing waste. All bids, projects, and offers of work require completion of an Initial Environmental Assessment at the project bid stage to identify any environmental aspects and to assess possible environmental impact.



Project: EAF Dust Treatment Client: Metalox International Location: Nationwide, United States

he electric arc furnace (EAF) is used to manufacture steel from 100 percent recycled scrap metal feedstock. The waste product from the process is EAF dust. Due to the high content of heavy metals. EAF dust is considered a hazardous waste and therefore must be treated, recycled, or sent to a hazardous waste landfill. Jacobs and Metalox recognized this as an area for making progress toward a more sustainable and profitable process.

Currently 1 million tonnes of EAF dust are produced annually in the United States, approximately one-third of which is sent directly to the landfill. This number is

expected to increase as the focus on infrastructure improvement continues.

The EAF Dust Treatment project for Metalox is designed to convert EAF dust into usable chemical products. This is done by nitrating the EAF dust and then selectively precipitating various metal oxides out of the solution. Further processing yields both saleable calcium nitrate product and a saleable zinc oxide product. Jacobs has partnered with Metalox to optimize the EAF Dust Treatment process, thereby minimizing the landfill bound heavy metal waste streams and creating a saleable product.



Recycling

Our company recycling programs are always being reviewed to increase awareness and improve efficiency.

Printing: Paper and Ink

For professionally printed materials, we prefer to use paper originating from properly managed forests; manufactured to include environmental qualities, such as post consumer recovered fiber; and soy-based inks.

Pilot Programs

Pilot programs are also in place in local offices around the world. These programs are monitored and reviewed for effectiveness and possible future implementation at additional office locations. Some examples include:

- Green Travel Plans: Sixteen of our large offices in the UK have implemented green travel plans. A green travel plan is a package of measures and incentives designed to allow the travel needs of site users to be understood and managed in a more sustainable and environmentally friendly manner. If these plans prove effective over the course of the next year, similar programs and plans may be created for additional offices worldwide.
- Accreditations: Our UK offices are accredited to ISO14001 and are developing a carbon reduction program in accordance with Greenhouse Gas Protocol ISO 14064 with certification anticipated later this year.



Project: Front Range Airport Client: Front Range Airport Location: Watkins, Colorado

ront Range Airport is a major small commercial airport in Colorado serving the Greater Denver Area. Jacobs was commissioned to evaluate and develop alternative designs and then design and supervise construction of a completely new water and sewer system for the airport.

Jacobs conducted a complete evaluation and made the recommendations to the airport for a total reuse wastewater system that would collect wastewater and storm water runoff, treat and then use the highly treated effluent for irrigation - all within the

airport's property. This solution allows the airport to minimize costs, minimize impact to the receiving stream and meet its needs for an environmentally sound sustainable solution. The solution results in a Zero Discharge process in which almost no material leaves the airport property, allowing the area to grow without water-associated limitations. Jacobs' decision to use an advanced wastewater treatment process called a Membrane Bioreactor (MBR) and ultraviolet disinfection contributed to the project's success.

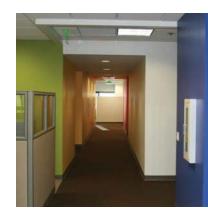
Building Green

At Jacobs we take to heart the benefits green buildings bring to our employees, to our clients, and to the environment as a whole. Therefore we are committed to not only building the best green spaces for our clients, but also to implementing green building practices in our business and office spaces as well. Following are two examples of current projects under way in the United States and the United Kingdom.

Santa Ana, California, Office

Our Santa Ana, Calif., office is on track to become our first office in the U.S. certified under the LEED-Commercial Interiors rating system. The relocation of our staff from our existing Cypress, Calif., office to Santa Ana presented the opportunity for us to apply our green design expertise to our own office space. Sustainable highlights of the remodel include:

- We contracted for Green Power Renewable Energy Credits (RECs) with Renewable Choice Energy to offset Brown Energy.
- We incorporated the purchase of Forest Stewardship Council (FSC) Certified Wood for millwork and systems furniture (workstations) as a sustainable alternative.
- We used low-emitting paint, adhesives, wood, and carpet and used rapidly renewable materials such as Kerei Board and linoleum flooring.
- We used Ultratouch Recycled Cotton Insulation in the walls and specific ceiling areas for acoustical properties.









- We are implementing Green Education elements into our sustainable office spaces, including signs and a monitor to highlight and showcase our sustainable approach to clients, both internal and external. The Santa Ana office will also serve as the centerpiece of a "Green Education Program."
- · We utilized maximum daylight and day-views in space planning in order to harvest daylight throughout the office floors where appropriate.
- We implemented the use of LED exit signs and decorative lighting to minimize energy use.
- We are providing preferred parking for alternative-fuel vehicles and vanpool/carpool.
- Throughout our offices, we are specifying products with recycled content.





Winnersh Triangle, Reading Office, United Kingdom

In June 2010, up to 1,200 of our staff will relocate from two existing office locations to a single purpose-built development at Winnersh Triangle in Reading, Berkshire, UK. This five-floor, 133,000-square-foot space will be our largest office in the UK.

The sustainability aspects of the design, construction, and operation of the new building are being assessed against the standards specified by the Building Research Establishment's Environmental Assessment Method (BREEAM). BREEAM is a tool widely used as a best practice measure in the UK to assess the environmental performance of both new and existing buildings. The Winnersh Triangle building is aiming to achieve a BREEAM 'Excellent' rating, which requires a high level of sustainability performance across areas, including Energy, Transport, Waste, Materials, Water, Management, Land Use, Ecology, and Health and Well-Being.



Consumer and Forest Products

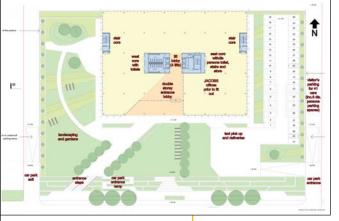
ey sustainable services in the Consumer and Forest Products Industry include water pollution control, solid waste reduction, water use, air emission control, fiber conservation, and energy savings.

Jacobs' innovative approaches have helped many mills keep fiber in the process, which saves the environment as well as our clients' money. We helped one client install a dissolved air-flotation clarifier to recover 20 tons/day of bleached fiber from its sewer, which represented \$3.5 million/year in savings. We also work with mills to revise their pulping and bleaching process to substantially reduce the detectable traces of chlorinated organic compounds, biochemical

oxygen demand, and suspended solids loadings in their effluents. This saves chemical costs and keeps them out of the sewer. Jacobs is also at the forefront of efforts to help clients increase energy efficiency. These kinds of projects included improving boiler efficiencies, optimizing processes for steam use, installing cogeneration systems to make electricity as well as process heat, recycling water, and using variable speed electric motor drivers.

We are currently engaged with several clients on front-end studies to develop processes that move mills toward energy self-sufficiency and a model carbon footprint.





Site plan and upper ground level landscaping

Sustainability features of the design specification include:

- Installation of Air to Air Heat Recovery and Active Chilled Beam HVAC systems to provide energy-efficient ventilation and climate control throughout the building.
- Proposed sub-metering of substantial energy uses and departments, allowing facilities staff to monitor and drive continuous improvements in operational carbon and energy efficiency following occupation.
- The building is designed to achieve substantial improvements on the dwelling and target CO₂ emission rates set within the UK Building Regulations and Energy Performance Certificate Regulations.
- Water efficiency measures, including dual flush toilets, low flow taps and showers and leak detection equipment.
- Floor to ceiling, low emissivity glazing will envelope entire building to maximize natural light to workspaces and 'Oasis' break-out areas.
- Sustainable-minded design of external landscaped areas. The design
 maximizes the area of external amenity space for staff, provides greater
 opportunity for ecological enhancement and reduces surface water runoff and flood risk from the development.
- Implementation of Green Travel Plan. The location has excellent public transport infrastructure, including a train station with a direct service to central London, bus service, a Park and Ride service, plus a covered cycling shelter for up to 50 cycles with end-of-trip facilities, including showers and lockers.

During procurement and construction phases, the primary contractor will be committed to operating to best practice site management standards and will liaise with the government-led Waste Resource Action Programme (WRAP) and National Industrial Symbiosis Programme (NISP). The building will also operate in adherence with the standards and procedures of Jacobs' Environmental Management System ISO14001.



Project: Solar Power in Aviation Client: Confidential Location: Nationwide, United States

ustainable investments offer both longand short-term advantages to airports, their communities, and the wider economy. Solar power can be an important element in a forward-looking airport sustainability effort. Jacobs is assisting airports across the United States as they explore the opportunities offered by solar power. Some services provided by Jacobs include:

- Sun orientation and shading studies
- Site/area location availability for solar
- Utility service and tie-in points
- Approximate cost estimating for solar development

- Solar implementation plans
- Solar design review
- Construction support.

Jacobs also works with aviation clients to coordinate with the FAA and other governing agencies, recommends the most economical, efficient, and aesthetic solar products and materials for the proposed application, and assists in determination of environmental benefits, including the value of Renewable Energy Credits (REC's).

Our Sustainable Future

At Jacobs we are committed to exploring all the possibilities that present themselves through our approach to sustainability. This report demonstrates the way our core values not only provide the solid framework for our philosophy on sustainable development, but also help us provide the best possible service to our clients. The project profiles and program examples detailed within these pages illustrate the way we put sustainability into practice for our clients and for ourselves. We do so in an open and transparent manner, and are responsive to any concerns about our practices.

As we look to the future, we know the best way we can make a difference in the environment is to continue to take a leadership role in helping clients meet their sustainable goals. From government to manufacturing, refining to buildings, all of our clients have an opportunity to reduce their environmental footprint through more efficient processes, better materials handling and use, more stringent energy-saving measures, and more. We are proud to offer continued support and direction for these efforts.

Our unique vantage point enables our passion for sustainability to reach across our regions, departments, people, geographies and disciplines – a company unified in its diversity. Our boundarylessness is clear.

At Jacobs, we see sustainability differently.

For more information, or to comment on the Sustainability Report, write to us at: contactus@jacobs.com.



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