

JACOBS



2014 SUSTAINABILITY REPORT

We See Sustainability Differently

Executive Letter

As sustainability continues to evolve in our marketplace, we consistently hone our focus on the way We See Sustainability Differently.

We published our first Sustainability Report in 2009. Much thought went into developing our message to ensure it reflects the work we've done for years, and the work we do now. Sustainability has been embedded in our culture since the beginning, and our message conveys our authentic philosophy. We see sustainability differently; it goes beyond our respect of the environment and encompasses our low-cost posture, emphasis on efficiency, dedication to quality and value, commitment to safety, and much more.

In this year's report we emphasize the way sustainability threads through all we do at Jacobs. Integral to that is the way we see sustainability through the lens of our core values: People Are Our Greatest Asset; We Are Relationship-based; and Growth is an Imperative. These values are the foundation that supports our commitment to our stakeholders to run a sustainable business.

We partner with our clients around the world to find the best solutions for their projects; solutions that help them maintain their triple bottom line. Efficient, timely services and tailored solutions are the best way we can save money for our clients, and help them make their organizations successful. Our commitment never wavers.

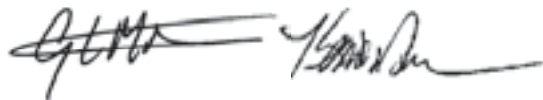
What does change and evolve are the tools, innovations, and advancements we make around sustainability. With acquisition of new talent, new partnerships, or new client relationships, we learn and grow every day. The ongoing evolution in our market place helps drive this spirit of innovation in our business, as we ensure we are leading the way in developing sustainable solutions for our clients.

The Global Reporting Initiative (GRI) continues to be the

methodology we use for reporting, guiding us as we seek opportunities to improve sustainability in our company as well as help our clients attain their sustainable project goals. As always, we remain committed to transparent, authentic reporting, adhering to GRI guidelines.

Looking forward, we expect the ongoing discussion on sustainability and climate change to continue in our market, and other industries around the world. Changing philosophies, new technologies, and new regulations all bring new challenges. As you read our 2014 Sustainability Report, we invite you to consider the way we parlay those challenges into many and varied opportunities to help our clients achieve the most cost-effective, efficient, and sustainable solutions for their projects.

We See Sustainability Differently.



Craig L. Martin
President &
Chief Executive Officer

Kenneth R. Burk
Senior Vice President
Quality, Safety &
Alliances



BY THE NUMBERS

SERVICES

LEED-ACCREDITED
PROFESSIONALS

621

(At publication)

BREEAM/CEEQUAL
PROFESSIONALS

16

(At publication)

ESTIDAMMA CERTIFIED
PROFESSIONALS

5

(At publication)

JacobsValue+

\$6 billion

For FY2013

GREEN GLOBE-ACCREDITED
PROFESSIONALS

8

(At publication)

GREEN STAR
PROIASSOC

19

(At publication)

CLIENT SATISFACTION SURVEY SCORES FOR 2013

higher than

91%

REVENUE FROM SUSTAINABLE PROJECTS

FY2013 Revenue from LEED Registered/Certified, BREEAM Certified, Estidama Certified

\$165.1 million

(Revenue is for full services, including sustainable services, provided for clients' qualifying projects)

4.3 million

METRIC TONS OF CARBON SAVED FOR OUR CLIENTS
THROUGH JACOBS SUSTAINABILITY+ IN 2013

INTERNAL

PAGES OF PAPER SAVED THROUGH OUR PRINT
REDUCTION PROGRAM

38.5 million

(Equivalent to 77,260 reams/214 tons/34,635 trees)

CHARITABLE DONATIONS MADE TO THE UNITED WAY,
AMERICA'S CHARITIES & GLOBAL IMPACT

\$1.19 million

POWER REDUCTION WORLDWIDE DUE TO
ENERGY SAVING MEASURES EMPLOYED ON
MANAGED PRINT DEVICES

30%

RANKINGS

No. 2

FORTUNE MAGAZINE
Jacobs ranked No. 2 in the
"Engineering & Construction"
category of *FORTUNE Magazine's*
2014 World's Most Admired
Companies.

Jacobs is one of the world's largest and most diverse providers of technical, professional, and construction services, including all aspects of architecture, engineering, and construction, operations and maintenance, as well as scientific and specialty consulting. We serve a broad range of companies and organizations, including industrial, commercial, and government clients across multiple markets and geographies. Our global network includes more than 200 offices in more than 25 countries, with operations in North America, South America, Europe, the Middle East, India, Australia, Africa, and Asia. We were founded in 1947, and our headquarters is in Pasadena, California.

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Sustainability permeates our culture. From technical project solutions to community participation, we strive to always make a positive impact in the world.



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Project Gallery

We are dedicated to exceeding client expectations. Our project profiles illustrate the way our sustainable services cross all market sectors and geographies.

SYMBOLS REPRESENTING SUSTAINABLE ELEMENTS

We use the following symbols to represent sustainable attributes of various projects and initiatives:



Carbon savings/reduction



Water savings/reduction



Cost savings/reduction



Social/Community benefits



Energy savings/reduction



Materials savings/reduction



Environmental benefits



Certified/Recognized/Award-winning

We See Sustainability Differently

We look at sustainability through the lens of our core values: People Are Our Greatest Asset; We Are Relationship-based; Growth is an Imperative. Our core values drive our leadership, business practices, and culture. They help us stay the course and run an ethical, relationship-based, and cost-conscious business — a sustainable business.

Our Philosophy

Jacobs® is committed to continuous improvement, helping solve our clients' toughest challenges, and creating a brighter future for our employees, their families, and their communities.



Our investment in sustainable development grows from this foundation and is upheld by our core values, which in turn enforce our commitment to a sustainable, safe, and ethical workplace.

Sustainable development is the delivery of competitively priced goods and services that satisfy human needs and add to 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. At Jacobs we reinforce this encompassing definition of sustainable development with a solid foundation: our core

values. These values allow us to see sustainability differently, ensuring that our commitment to sustainable development crosses regions, cultures, departments, and disciplines, and permeates all we do.

We See Sustainability Differently

This report illustrates the connection between our philosophy, our core values, and the principles of sustainability that help guide us. While these facets keep us grounded and steadfast in

“We are playing a key role in shifting clients' awareness and mindset on environmental stewardship, and creating a legacy through providing the know-how of sustainable approach. We focus on solutions related to elements necessary for life, energy, and water, keeping in mind economical reliability and high efficiency.”

Lina
Jacobs, Inside Sales Manager
Casablanca, Morocco



OUR PHILOSOPHY

our mission, we are guided and engaged by much more: our clients, our employees, our Board of Directors, and our unwavering commitment to run a diverse and ethical business. As you explore the various sections of this report, learn about the elements that make up our approach to sustainable leadership, and observe them put into action through our business and our employees, it becomes clear that at Jacobs...

We See Sustainability Differently.

Core Values: Tenets of Sustainable Development

At Jacobs, we understand that the ability to sustain requires a solid foundation. It is no coincidence that our core values—People Are Our Greatest Asset, We Are Relationship-based, and Growth Is An Imperative—align so well with the core drivers of sustainability.

Our core values, like the tenets of sustainable development, are inextricably linked. Each balances the others to create a cohesive whole. This balance provides the framework for us to meet our clients' sustainable project goals, enhances our internal sustainable practices, and supports our ability to grow as a company. At Jacobs, sustainable development is evident across all market sectors of our business and is woven into the fabric of our culture. It's part of who we are.

People Are Our Greatest Asset

Our most valued asset is our people, which is why we focus so strongly on safety for our employees, partners, and clients. As engineers, architects, scientists, planners, builders, and more, our people are the foundation for our commitment to sustainable development. Our people are experts, the force that brings the best business results to our clients. They are skilled and experienced in the delivery of sustainable development, design, and related services. We come from diverse backgrounds, speak various languages, and live in geographies around the world. We are residents of Chicago, Melbourne, Santiago, Hong Kong, and beyond, yet we work without boundaries. Our diversity strengthens our ability to offer innovative and sustainable solutions all over the world for our clients and our communities.

Ultimately, it's our people who help make our collective environment a safer, more efficient, and more sustainable place to live.

We Are Relationship-based

The way we interact with others and our surroundings is paramount. Jacobs is committed to building deep, lasting relationships with our clients. 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 tangible, technical solutions that make a difference to our clients' social, economic, and environmental goals, resulting in a solid triple bottom line.

Growth is an 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 on average 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. Having such laser focus on our own costs allows us to offer competitively priced services. 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.



OUR PHILOSOPHY

Seven Principles of Sustainability

At Jacobs, we are authentic in all that we do, and we do not take commitment lightly. Therefore, it is natural for us to create guidelines to assist us in our ongoing pursuit of sustainable development. With our core values as the foundation, these seven principles illustrate the way sustainability is woven into the fabric of our company.

1

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.

2

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.

3

Sustainable development is integrated into our business

We integrate appropriate sustainable development practices, including continuous performance improvement processes, into our work processes and programs.

4

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.

5

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.

6

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.

7

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.

BeyondZero®

Safety is a top priority at Jacobs. It's more than a policy manual or list of do's and don'ts. BeyondZero® is the program that promotes our Culture of Caring at Jacobs.

BeyondZero goes beyond an incident- and injury-free workplace, and encourages all employees to think about the ways we can put the health and safety of our employees first in everything we do. After all, People Are Our Greatest Asset, so ensuring their safekeeping makes perfect sense. As part of our BeyondZero program, our employees participate in formal safety-related committees. As individuals, we are committed to making safety a personal value and taking responsibility for ensuring no one is injured on or off the job — including our colleagues, families, and friends.

OUR PHILOSOPHY

Safety Week 2014

Jacobs is proud to have been part of Safety Week 2014, an initiative of 31 national and global construction firms that joined forces with a single aim: to inspire everyone in the industry to be leaders in safety. The official Safety Week dates were May 4-10, 2014.

We used the week as an opportunity to publicly restate our safety commitment by participating in

a series of activities, events, and discussions across our organization. A highlight of the week were the “safety selfies” submitted by our employees around the world, demonstrating their commitment to safety and our BeyondZero culture. Read more about Safety Week and how we shared our culture of caring in the Culture Section of this report.

Every week is safety week at Jacobs. ■



Client Features

Our sustainable principles and practices are designed to help clients achieve success by improving their businesses.



**U.K. ENVIRONMENT
AGENCY**
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**CHICAGO
DEPARTMENT
OF AVIATION**
14



HONG KONG GEO
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**HUMBERSIDE POLICE
AUTHORITY**
22



**NORTH CAROLINA
STATE UNIVERSITY**
26



**EAST MIDLANDS
DEVELOPMENT
AGENCY
(NOW HOMES AND
COMMUNITIES
AGENCY)**
29



NETWORK RAIL
32

Sea Change

U.K. Environment Agency Works with Nature to Reduce Flood Risk



Sometimes letting the sea in is the best way to manage flood risk. The largest coastal realignment flood-control project on the open coast of Europe looks more natural than engineered. Rather than dikes and buttresses, it relies on a new saltwater marsh.

Shortly after completion in late 2013, the English Channel hurled a handful of the decade's worst storms at the south coast near Portsmouth, strongly testing flood defenses along a vulnerable area of southern England's coastline. At Medmerry we removed a 110-meter chunk of the beach to allow surging seawater into 183 hectares of former farmland newly ringed by four miles of low earthen floodbanks. "Normally by now we would've had flooding," says a local resident, "but we've had none at all."¹

New Neighbors

As part of an ongoing framework relationship with the U.K. Environment Agency since 2000, Jacobs became involved with the Medmerry project at its inception in 2006. We worked with the Environment Agency to develop the strategic policy for this section of coastline, which allows a managed realignment of the historic line of defense. Creating a vast new intertidal area that

allows waves and storm surges to dissipate against a natural habitat provides a sustainable alternative to the historic practice of maintaining a fixed line of defense.

At first, many feared letting the sea inland. But we supported the Environment Agency by working with stakeholder advisory groups that included community members, inviting them to join us in developing the solution. In doing so, the confidence of the people increased, and doubters became believers. Not only did people begin to sense their increasing protection from risk, but so did a variety of wildlife, including the birds. Nesting pairs of several protected species hatched chicks on site during construction. And after a winter of harsh storms with no flooding, residents welcomed the new salt marsh and its inhabitants as good neighbors.

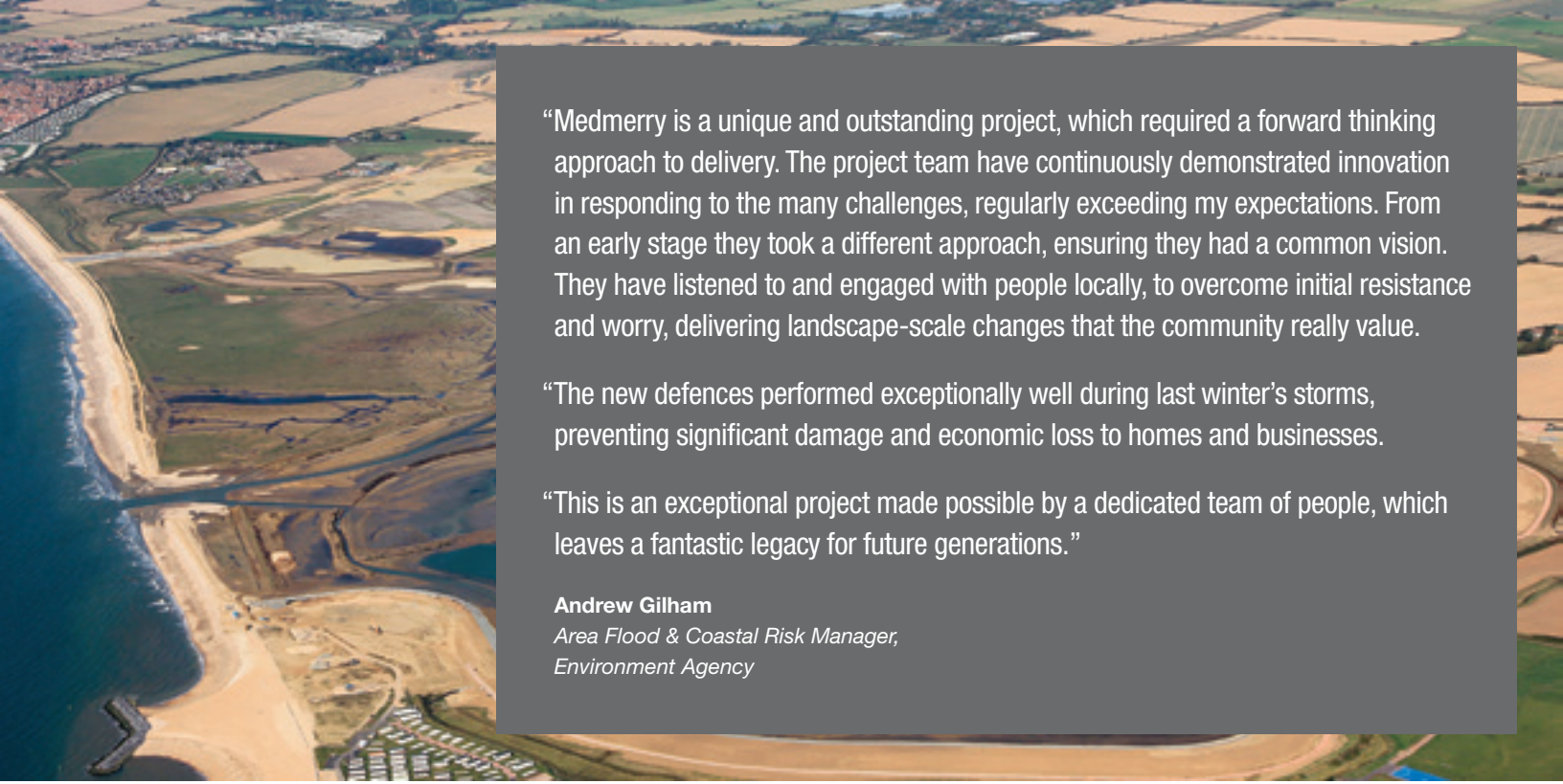
Push, Pull

Designing for natural processes is as much push as pull. Along the central part of the tract, on its lowest land, a tidal estuary will develop merely by seawater having unrestricted access. But along the edge, like beads along the shore, Jacobs worked with the Environment Agency to design "bird

NATURAL ALTERNATIVE

The Medmerry Flood Risk Management Scheme, the largest coastal realignment flood-control project on the open coast of Europe, owes its success largely to an alternative flood-prevention solution. Rather than dikes and buttresses, Medmerry relies on an intertidal area that allows waves and storm surges to dissipate against a natural habitat. This nontraditional, low-maintenance method avoids about £250,000 in repairs per year. It provides flood protection for 348 properties and to the only road serving 5,000 households and critical infrastructure in Selsey, England.

Continued on page 12



“Medmerry is a unique and outstanding project, which required a forward thinking approach to delivery. The project team have continuously demonstrated innovation in responding to the many challenges, regularly exceeding my expectations. From an early stage they took a different approach, ensuring they had a common vision. They have listened to and engaged with people locally, to overcome initial resistance and worry, delivering landscape-scale changes that the community really value.

“The new defences performed exceptionally well during last winter’s storms, preventing significant damage and economic loss to homes and businesses.

“This is an exceptional project made possible by a dedicated team of people, which leaves a fantastic legacy for future generations.”

Andrew Gilham

*Area Flood & Coastal Risk Manager,
Environment Agency*





“We have protected homes and businesses from flooding and provided a natural resource for wildlife and for people to enjoy. We faced technical, economic, and social challenges that had, in the past, proved impossible to solve, so we had to be innovative. The solution is the first of its kind.”

Terry

Jacobs, Project Director

London, England, United Kingdom

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islands” to provide higher-level roosting and breeding sites. Even across the new floodbanks, on the freshwater side, meandering channels were built, along with ponds, reed beds, ditches, and grassland areas for reptiles.

And yet, not a single construction day was lost to encroachments on endangered species or nesting birds. The Royal Society for the Protection of Birds, which now manages the new wildlife sanctuary, worked with farmers in the area to sow crops attractive to nesting birds in safe areas, and crops that were unattractive to birds in future construction zones.

This “push-pull” method worked flawlessly. Even more pull for humans is a network of footpaths, bridleways, viewpoints, and car parks

FEATURE | ENVIRONMENT AGENCY



to serve tourists who arrive to take full advantage of the new nature preserve.

Counter-Act

Compared with more traditional solutions, the project approach used at Medmerry is more sustainable and significantly reduces whole life-cycle costs. This nontraditional method needs little continuing attention and avoids about £250,000 in repairs per year. It provides direct flood protection for 348 properties and to the only road serving 5,000 households and critical infrastructure in Selsey.

In a similar spirit, and in response the Environment Agency's request to find efficiency savings on the project Jacobs proposed a new way to manage the project. Working with the Environment Agency, we drew on our past experience, and reorganized our team based upon the principles of "best person for the job" rather than "traditional roles." This allowed us to avoid duplication of roles and created an integrated, co-located team working from a single office. Altogether, this saved the client about a quarter of the project management expenses.

Perhaps the most important tradeoff might be to help other nearby communities. Because of rising sea levels, up to 600 hectares of internationally projected intertidal wildlife habitat could be lost over the next 100 years. For other flood-control developments to go forward, these losses need to be offset with new wetlands. The new habitat created at Medmerry has already put about a third of that needed into the bank. ■

¹Quote from:
<http://www.theguardian.com/environment/2014/feb/07/should-coastal-britain-surrender-to-tide>



Re-configuring O'Hare

Re-aligning Runways Improve Flight Delays Nationwide



Re-configuring a major airport is not easy. Since its creation during World War II, when it was better known as Douglas Field, O'Hare International Airport in Chicago, Illinois, USA, relied on intersecting runways that later strained efficiency as the airport grew. Despite the cross-runway configuration, O'Hare developed to become the world's busiest airport in takeoffs and landings. Increased flight activity brought congestion and flight delays that caused ripple effects throughout the nation's air system. When flight caps were mandated to decrease delays in 2005, O'Hare lost its status as the world's busiest airport.

Long before flight caps were in place, O'Hare was well aware of increasing delays, and had come to the realization that re-aligning the runways to a more efficient east-west configuration was necessary. In 2005, Jacobs, as a major partner in a joint venture, was selected to design a new 10,800-foot runway that is the cornerstone of the Chicago Department of Aviation's (CDA) \$8 billion O'Hare Modernization Program (OMP).

The two-plus-mile Runway 10C-28C opened in October 2013, two months ahead of schedule, providing O'Hare its fourth parallel runway. The completion of Runway 10C-28C allows for reorientation of traffic flows to an east-west

configuration, which is estimated to cut flight and passenger delays in half, significantly improving air traffic flow across the U.S.

A Carefully Choreographed Change

During a decade-long infrastructure modernization program in the confines of Chicago O'Hare International Airport, every step of building the new runway had to be coordinated with more than 20 other airfield projects also being completed within the footprint of the new runway facilities. All coordination was completed while maintaining continuous airfield operations and operational safety for the traveling public.

A railroad and major drainage ditch were relocated twice, and major airport facilities, including cargo operations for FedEx and a major airline, were moved into new accommodations with no down time. One cemetery had to be moved, while another remained open with 24-hour public access. Hundreds of commercial and residential properties had to be acquired. And, finally, the south detention basin was relocated to accommodate the east end of the runway.

Jacobs and the joint venture partners worked closely with the OMP, CDA, and other stakeholders to choreograph the design and

ROUNDRIP SAVINGS

Runway 10C-28C, Chicago O'Hare's first to accommodate super jumbo jets, allows the airport to have three simultaneously parallel arrivals in an east-west orientation and is estimated to cut flight and passenger delays in half. Sustainable initiatives were incorporated into the runway design from the start; reducing waste and emissions, using cost-effective materials, and involving local businesses. The runway project generated an economic boost of nearly \$4 billion to the region, and its opening supports nearly 50,000 permanent jobs.

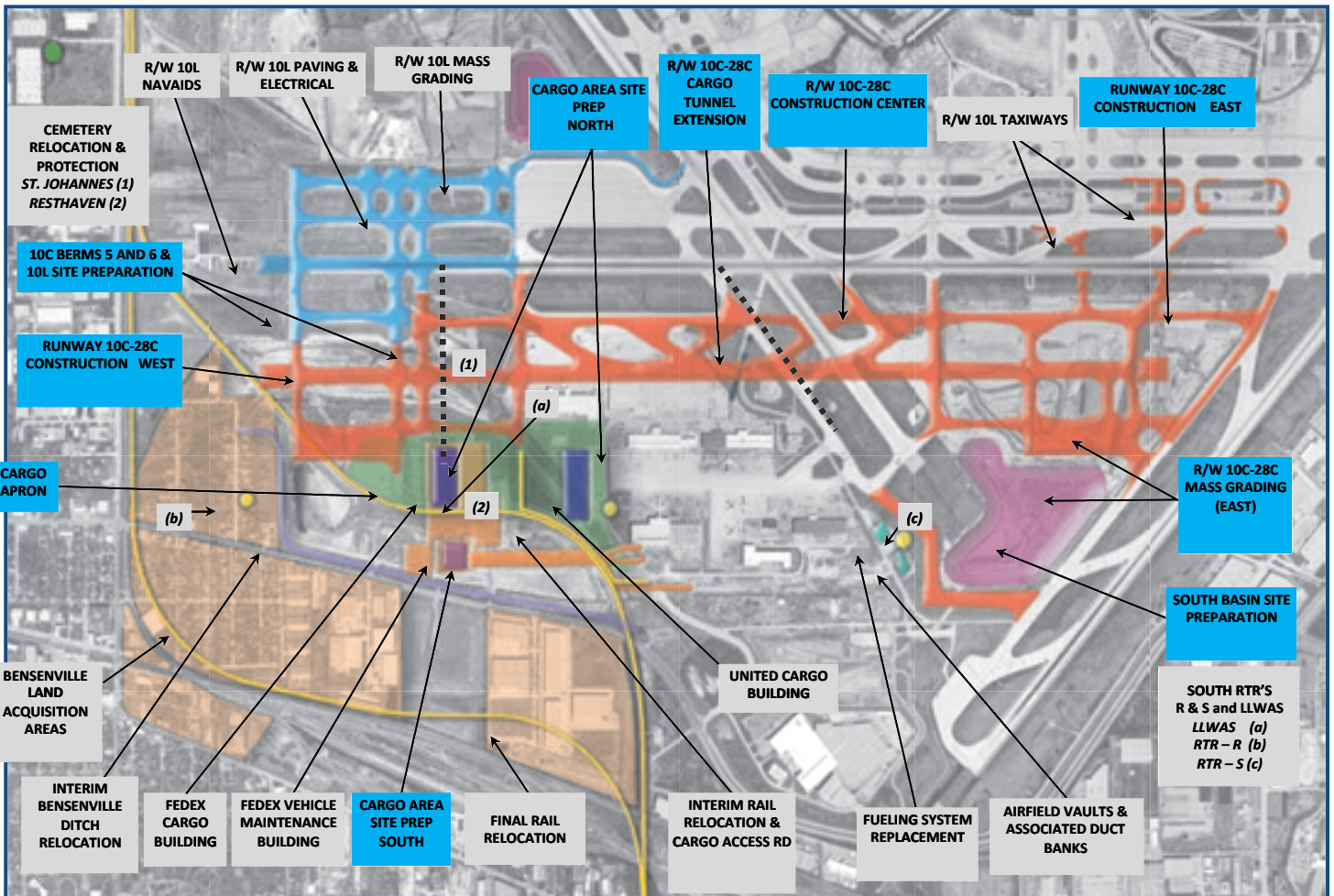
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ORD Runway 10C-28C: Complexity

= Runway 10C-28C Design Element
 = Enabling Project





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construction activities to maintain the project schedule and complete ahead of schedule and under budget. This was accomplished through persistent devotion to project management and communications among all team members and stakeholders throughout the nine-year design and construction process.

Home-field Focus

Despite the concentrated flurry of activity, the CDA had high expectations for the incorporation of sustainable initiatives into the runway design, including reducing waste and emissions, utilizing cost-effective materials, and involving local businesses.

Major initiatives incorporated into eight runway construction projects include:

- 100 percent of materials obtained locally, including concrete, aggregates, and fencing (Berms 5 & 6 Relocation Project)
- Solar power lighting utilized to save hundreds of thousands of dollars in construction cost through the elimination of power feeds and associated duct banks and cable runs (Runway 10C-28C Center Package)

- Diversion of 100 percent of construction waste (630,000 tons) from landfills (Cargo Area Site Prep and Interim Ditch Project)
- 21 percent of new materials contained recycled content (Runway 10C-28C East Paving Project)
- Salvaged demolished materials for re-use, such as crushing demolished concrete pavement for reuse as aggregate for runway and taxiway shoulders, haul routes, and service roads (all eight runway projects)
- Use of wildlife-deterrent, low-maintenance turf grasses that require no irrigation and minimal mowing (all eight runway projects)

The Runway 10C-28C East and Center projects were awarded two “Green Airplanes” by the CDA based on their Sustainable Airport Manual criteria—an extremely rare achievement for airfield civil projects. Since its opening, the Runway 10C-28C Project has won accolades from the engineering and construction community:

- Infrastructure Project of the Year from the Construction Industry Service Corporation

- Honor Award from American Council of Engineering Companies, both national and Illinois
- Construction Project of the Year Award for the projects, contributions within the industry and service to the community from March of Dimes

Sustainable Gateway

Air travel today, particularly between major international airports like O'Hare, is already seeing increasingly larger aircraft such as the new Boeing 747-800 and "super jumbo" Airbus A380 models. These aircraft require improved runways and taxiways for safe operation. The addition of Runway 10C-28C, O'Hare's first to accommodate

the newest generation of super jumbo jets, allows the airport to have three simultaneously parallel arrivals in an east-west orientation.

The \$1.3 billion runway project generated an economic boost of nearly \$4 billion to the region. The project created more than 1,000 construction and professional services jobs annually during its nine-year span, and its opening supports nearly 50,000 permanent jobs.

Runway 10C-28C's completion is the culmination of the first phase of the \$8 billion OMP, and we look forward to working with the CDA to see the program through to completion. ■

"Chicago O'Hare's Modernization Program goal to make sustainability top priority was underscored with the creation of the Sustainable Design Manual in 2005. This document, used by airports worldwide, set the tone for our Runway 10C-28C design team. We incorporated environmentally conscious and cost-effective sustainable measures in each design package."

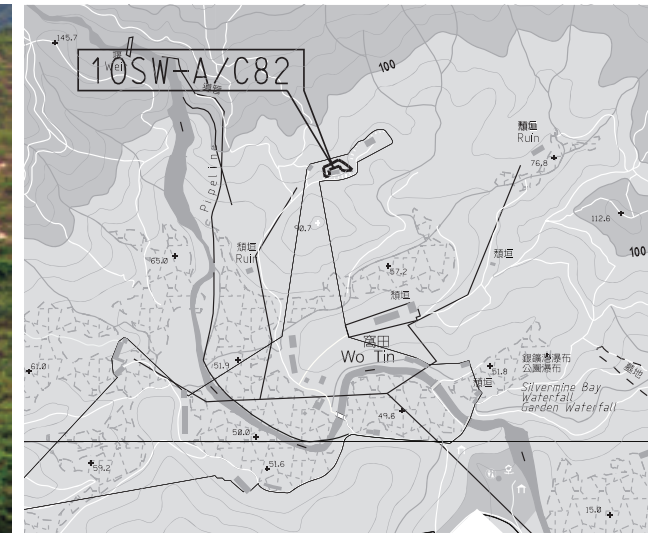
Kris

*Jacobs, Senior Civil Engineer, Aviation Division
Chicago, Illinois, USA*



Solid Ground

Sustainable landslide solutions keep Hong Kong residents safe



The Government of Hong Kong created the Geotechnical Engineering Office (GEO) to protect its residents from landslides. The program began by focusing on man-made slopes, which presented the greatest danger, and over a 30-year period dramatically reduced the risk posed by these slopes. Starting in 2010, the GEO shifted its emphasis to include natural hills. Natural slopes pose unique challenges for engineers because, as well as being less accessible, interfering with untouched terrain can damage the environment. Hong Kong needed sophisticated engineering assistance to find solutions that balance safety and expense.

Enter Jacobs. With decades of experience tackling the most complex geotechnical challenges, the company was ready to help Hong Kong develop landslide prevention measures.

Systems for Success

The GEO addresses landslide danger in a systematic way. The first stage of its Landslip Prevention and Mitigation Program is assessing the danger posed by slopes within the region; a risk-based priority ranking system targets the most hazardous hillsides. For identified slopes, Jacobs

works with the GEO on prevention measures, matching mitigation strategies with identified hazards. Engineers and geologists draw on a range of options including soil nails (reinforcing bars drilled into slopes), retaining walls, surface drainage systems, and concrete check dams.

Selecting the right landscaping is also critical. Trees and other vegetation improve the appearance of slopes and provide environmentally friendly, cost-effective erosion control. Jacobs has worked with the GEO to develop best-practices guidelines for the use of vegetation; guidelines studied and adopted around the world.

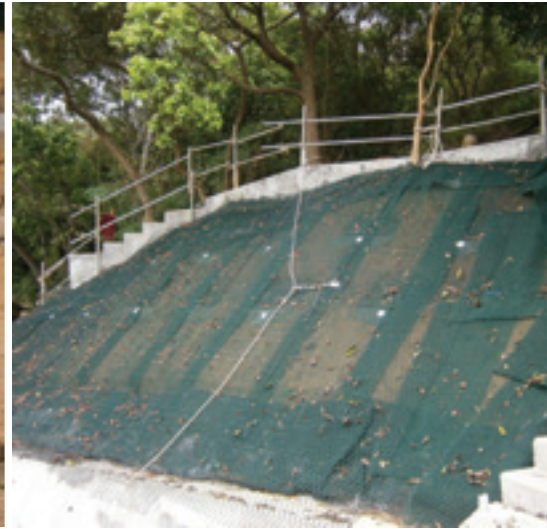
Supporting Nature

The GEO recognizes Jacobs for its contributions to the landslide mitigation program. It awarded the company its Bronze Award for landscape treatment in the natural terrain catchment category and its Silver Award in the landscape treatment of man-made slope/retaining wall category. Jacobs experts continue to conduct detailed studies, design mitigation measures, and develop landscaping plans to both reduce risk and improve the appearance of slopes, retaining walls, and barriers.

A SAFE ENVIRONMENT

The Government of Hong Kong is committed to keeping residents safe and minimizing environmental impact. With help from Jacobs, the Hong Kong GEO developed a systematic, environmentally conscious approach to landslide mitigation.

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“We are proud to have worked with the Government of Hong Kong for more than 18 years on its landslide preventive measures program. Since the inception of the program in 1995, we’ve helped with enhancing slope safety throughout and minimizing landslide risks in Hong Kong.”

Leslie
*Jacobs, Divisional Director
Hong Kong*

Continued from page 19

Landslide hazards in Hong Kong remain a challenge. The population is growing and new development is increasingly pushing into hilly terrain. However, the GEO is making a difference. Only 161 landslides hit Hong Kong in 2012, almost half the previous annual average, a reduction due in part to the 150 government-owned slopes upgraded each year. Hazards remain, but with the help of Jacobs geotechnical engineers, Hong Kong is doing its best to keep residents safe. ■



Serving the People

Humberside Police opens headquarters;
sets benchmarks for sustainability



In 2009, Humberside Police Authority identified the need for a new Divisional Police Headquarters and Custody Facility – part of a long-term strategy to promote integrated work and deliver value and efficiency. Jacobs was appointed to provide full architecture, engineering, and planning services to design a community-facing headquarters with 40 secure custody cells and 9,000 square meters of flexible office space. Located on former industrial land in Kingston upon Hull, United Kingdom, the site was constrained by an existing gas works, a busy street, and ground contamination. The project presented an ideal opportunity to reclaim derelict land and provide a flexible, energy-efficient building that could be easily adapted to the evolving requirements of 21st century policing.

Keys to Sustainability

The new headquarters building has three main elements: offices, custody, and storage. The main office building is oriented east-west, with the south façade shaded to reduce solar gain. The office space is arranged over four floors in parallel wings separated by a central atrium. The atrium acts as the key circulation space through the building—containing lifts and stairs together with key social spaces such as a café and informal meeting areas.

Energy is provided by biomass boilers, helical wind turbines, and photovoltaic solar panels. The concrete structure is exposed internally, providing a heat sink to aid cooling through night-time purge. Green rooftops with living plants increase thermal mass and promote biodiversity. Highly insulated, prefabricated timber panels used for infill walls provide low levels of air leakage and reduce construction time.

The combination of renewable energy and highly insulated building has reduced monthly energy use by a third — enabling a greater proportion of the police budget to be dedicated to active policing.

Public-minded

The facility needed to be visible and accessible to the local community while meeting specific security requirements. The front portion of the building is public with open areas, while internal offices, the custody suite, service yard, and ancillary accommodations are secure. A screen wall acts as the security perimeter, thereby separating the public entrance from secure areas and preventing the need for unsightly security fencing and gates.

UPHOLDING SUSTAINABILITY

The Divisional Police Headquarters and Custody Facility project gave Humberside Police Authority an opportunity to redevelop a brownfield site and create a world-class, energy-efficient building that meets community needs. While visible and accessible, the facility is very secure. Green roofs on the custody and storage facilities promote biodiversity, while renewable energy is provided by biomass boilers, wind turbines, and photovoltaic solar panels. The combination of renewable energy and a highly insulated building has reduced monthly energy use by a third.

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FEATURE | HUMBERSIDE POLICE AUTHORITY





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The brownfield site chosen for the development, previously used as a gas works, had constraints that included ground contamination, obstructions, and stand-off zones from gas holders and mains that remain operational on adjacent property. This brownfield location provided Humberside Police with a sustainable alternative to buying and building on a greenfield site, the

opportunity to reclaim derelict land, and had the added benefit of nearby links to public transportation and easy access to the wider city.

Delivering for the Community

The entire project was delivered with all design disciplines operating within a single Building Information Model (BIM). The use of BIM facilitated enhanced coordination between disciplines, leading to a reduction in site waste through greater accuracy of schedules, fewer queries arising from the site, and less redesign to suit on-site conditions.

Jacobs' multi-discipline approach to design allowed us to deliver optimum value by considering subtle, multiple benefits. Security requirements, for example, have been implemented unobtrusively and cost effectively

“Building Information Modeling was a significant factor in delivering a sustainable solution to Humberside Police. We delivered the project with all design disciplines operating in a single Building Information Model. Enhanced coordination led to a reduction in site waste through greater schedule accuracy, fewer queries from the site, and less re-design to suit on-site conditions.”

Ross

*Jacobs, Project Architect
Leeds, England, United Kingdom*

by incorporating a low wall within the landscape. An attenuation pond on the western boundary provides flood mitigation while serving as an added visual amenity to users of the staff café.

The project received the SCALA Civic Building of the Year Award for 2013, and is rated “Excellent” by the Building Research Establishment Environmental Assessment Method (BREEAM®). ■





Graduated Power

North Carolina State University installs co-gen plant, takes step closer to climate neutrality



A new 11-megawatt gas-fired cogeneration power plant replaces an aging boiler, reduces greenhouse gas emissions by 8 percent, increases efficiency by more than a third, and saves more than \$4.3 million per year in operating costs. This project helps propel North Carolina State University toward its goal of climate neutrality by 2050.

For more than ten years, Jacobs has been working with NC State on energy-related projects, and this \$42 million co-generation plant is a stellar example of how efficiency can pay for itself. An energy services company is funding construction of this and another steam plant renewal project on campus by using projected savings from the co-generation system and other energy conservation measures over the next 17 years with minimal cash outlay by the university.

Making the Grade

To meet air permit requirements, this project faced an extremely tight timeframe. Despite being the largest energy performance contract ever completed by the state of North Carolina, Jacobs, which provided architecture and engineering design services for the project, streamlined the process with the state, allowing the project to be

completed in phases. Design began in January 2010 and the plant became fully operational in September 2012.

Because this plant is located in the center of campus, noise control is a primary concern. The university wanted the new plant to maintain the same noise levels as the previous plant, which had much less capacity and did not include turbines or gas compressors.

The original plan called for the new equipment to be installed on the existing foundation, but our evaluation found it could not handle the dynamic structural requirements of the turbine vibrations. A large portion of the second level and the basement foundations were removed and rebuilt as a structure tuned for the equipment. To further reduce noise, we located the gas compressors inside the building.

This plant is adjacent to a recreational center and student housing, and no noise complaints have been received.

Promoting Flexibility

A prime motivation for the university, other than to rely on clean-burning natural gas, is to increase redundancy and ensure the continued operation of the research and student housing facilities on

ADVANCEMENT IN EFFICIENCY

The new 11-megawatt gas-fired cogeneration power plant at North Carolina State University reduces greenhouse gas emissions by eight percent and increases efficiency by more than a third, saving more than \$4.3 million in annual operating costs. To ensure continued operation of campus research and student housing facilities, the steam and power generating equipment can run on No. 2 fuel oil if natural gas becomes unavailable. Labeled and color-coded piping systems allow the facility to serve as an on-campus learning environment for engineering students.

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FEATURE | NORTH CAROLINA STATE UNIVERSITY





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campus under any condition. The steam- and power-generating equipment are capable of running on No. 2 fuel oil if natural gas becomes unavailable. This not only increases equipment availability, it enables the university to save money by purchasing natural gas at a reduced, interruptible rate.

In addition, a new “blackstart” emergency generator is in operation. This emergency generator allows the university to restart the utility plant even if the local utility company goes offline. This allows the plant to operate in “island mode” in the event of an emergency power outage and provides 11-megawatts of power to keep the research and dining facilities running without interruption.

“The NC State Co-generation project is a triple win, allowing the university to reduce their carbon footprint, save energy, and improve resiliency of their campus electrical distribution system by providing electrical generation equal to one-third of campus peak demand.”

Rick

*Jacobs, Principal – Global Buildings
Raleigh, North Carolina, USA*

Star Student

All NC State projects are designed to meet LEED Silver criteria, but because we were able to include energy conservation improvements along with re-use of the existing building and materials, we have submitted this project for LEED Gold certification (award pending). But perhaps the greatest recognition will come from students. This facility provides the university with an on-campus learning environment for engineering students. The piping systems are clearly labeled and color-coded, which fosters the learning process.

As this project is completed, our relationship with NC State continues with the design for a substation and an electrical master plan for the Centennial Campus. We look forward to providing professional design and engineering services to the university for years to come. ■

Clean Sweep

Europe's largest remediation project restores Avenue Coking Works back to nature



During its four decades in operation, the Avenue Coking Works near Chesterfield, United Kingdom, produced millions of metric tons of smokeless fuel—coke—from coal. This left a legacy of contamination, much of it in two lagoons of toxic sludge adjacent to the River Rother. Much of the soil on the 98-hectare site is contaminated with hydrocarbons, cyanides, and arsenic.

The East Midlands Development Agency (now Homes and Communities Agency¹, or HCA, the national housing arm of the British government) took on the task of returning the site to beneficial use in 1999, and commissioned Jacobs to oversee much of the work.

Future development of the site, which includes plans for housing, a school, and many green spaces, was dependent on reducing risk to human health and the environment. This project is well on its way to achieving that goal by 2015.

Custom Care

The client faced significant potential liability from the many health and safety hazards on site. When we took on the role of designer/contract administrator, we quickly introduced site security, stabilized the containment of the largest waste

lagoon, began to drain down the tanks in the chemical plant, started demolition works, and installed a plant to treat surface water. We also assisted the client in communications with the local community and regulators to address the negative stigma attached to the site and to foster productive relationships among all stakeholders.

Through the rigorous use of new risk-based assessment tools, we discovered the volume of truly contaminated materials were one-sixth the size anticipated (0.6 million cubic meters rather than preliminary estimates of 2.7 million cubic meters), significantly reducing the potential environmental impacts and costs associated with treatment and disposal.

Following extensive trials of innovative laboratory and site-based technologies, such as thermal desorption, soil washing, bioremediation, and soil stabilization, this led to a remediation strategy using on-site treatment and material re-use thus minimizing waste to landfill.

All of this came together into a tailored environmental management system that enabled the identification, assessment, prioritization, and management of all significant environmental aspects and impacts.

ENVIRONMENT RECLAIMED

To redevelop the former Avenue Coking Works site for beneficial use, any risk to human health and the environment had to be mitigated. For the largest remediation project in the United Kingdom to be successful, a tailored environmental management system was put into place, enabling the identification, assessment, prioritization, and management of all significant environmental aspects and impacts. We've recorded more than £9.1 million in cost savings for the Homes and Communities Agency, while our sustainable-related activities led to a carbon savings of 6,074 tons. The project is on track to successfully complete in 2015.



Safe Haven

Some protected species would inevitably be displaced during the main works. To minimize delays and their associated costs, and to accelerate the return of wildlife, we designed ecological habitat enhancements and proposed a new nature reserve to act as a safe haven for species during the project.

Because the work involved complex planning conditions, permits, and licenses, we helped the client through procurement of a contractor capable of reducing risks and environmental hazards. We continue to serve as the client's technical advisor to ensure the contractor's detailed design is technically and environmentally feasible and that works are carried out in accordance with all requirements.

Community Ready

The design work on The Avenue² received an interim CEEQUAL assessment "Excellent" award. In addition, we've recorded more than £9.1 million in cost savings for our client, while our sustainable-related activities led to a carbon dioxide savings of 6,074 tons. Collectively, our work has helped HCA reduce risks to health and safety and environmental incidents, and consistently work within and maintain all legal requirements.

Jacobs looks forward to assisting HCA with the continued elimination of environmental risk at this site and many others in the future. ■

¹<http://www.homesandcommunities.co.uk/aboutus>

²<http://www.theavenueproject.co.uk/default.aspx>



“This project embraces sustainable development by bringing a derelict site that blighted the community and was an environmental hazard back into beneficial use. Working in close partnership with the client and using innovative techniques we have realized significant cost savings for the client without compromising delivery to the highest health, safety, and environmental performance standards.”

Brian

*Jacobs, Senior Consultant
Avenue Coking Works site
Chesterfield, England, United Kingdom*



Signature Station

Network Rail leads the way with innovative, sustainable station



When Network Rail needed to build a sustainable metropolitan train station as part of their £5.5 billion Thameslink Program, they turned to Jacobs in 2007 to design a solution.

Blackfriars Station, the point at which the Thameslink line crosses the River Thames, was already a major capacity chokepoint, and expected to become more so by 2018 when trains are projected to be 50 percent longer. The Victorian-era station had become outdated, with poor connections between rail and subway lines, while its aging bridge was too narrow to handle long, high-capacity trains.

Network Rail asked Jacobs to transform Blackfriars into a signature station that would serve as an access point for the whole city, provide additional transport options for citizens and visitors, and lead the way in designing public structures for long-term sustainability.

Improving the Flow

Expanding capacity was the driving motivation. Network Rail planned to move from eight- to 12-carriage trains, but longer trains require longer platforms. The solution was to extend the platform across Blackfriars Rail Bridge, making it the first

loading platform to span the River Thames. Passengers could board trains in a glass-enclosed, light-filled bridge across the river.

To accommodate the new platforms, the 126-year-old bridge was widened by nine meters, or almost 30 feet. A creative design solution took advantage of existing piers from an abandoned freight rail bridge, sparing the project the expense of constructing new bridge piers. With the opening of the South Station entrance, Blackfriars became the only station in London to serve both sides of the River Thames.

An additional challenge arose when damage dating to a World War II-era bomb was discovered during construction, and 8,000 tons of wrought iron had to be replaced with new structural steel. In spite of these challenges, the station opened on time and a second phase has already begun.

Solar Bridge

When Network Rail sought Jacobs' advice on making Blackfriars the most sustainable station in London, the long roof spanning the Thames became a primary source of inspiration. Covering more than 6,000 square meters, it represented an opportunity to harness the sun. A design quickly

SUSTAINABLE GATEWAY

Initially motivated by the need to expand capacity, Network Rail's goal for Blackfriars Station morphed into the desire to develop a signature station to serve as an access point to the city and enhance transportation, and also to lead the way in designing public structures for long-term sustainability. Blackfriars is now the most sustainable station in London. Accommodating longer, more frequent trains, it boasts the largest solar bridge in the world, with panels that help reduce carbon dioxide emissions by 550 metric tons annually.

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emerged that embedded more than 4,400 solar panels, making it the largest solar bridge in the world and the largest solar array in London.

The solar panels are designed to generate up to half the station's energy and reduce carbon dioxide emissions by 550 metric tons per year, equivalent to 4,500 round trips between London Heathrow and Paris.

The work of adhering to tight sustainability requirements didn't end there. To further reduce the carbon footprint, a Life Cycle Energy Analysis (LCEA) of steel and concrete was completed during design. Due to the quantities involved in the project, improving the recycled content of these materials led to a significant reduction in the project's embodied carbon. The LCEA



“A receptive client and a collaborative approach by the project team led to early engagement with our sustainability specialists. This was a key step in the development and realization of this landmark project, providing Network Rail with a sustainable, flagship station in a prominent location.”

Mason

*Jacobs, Principal Environmental Consultant
London, England, United Kingdom*



FEATURE | NETWORK RAIL

recommended the use of steel with a minimum 20 percent recycled content and concrete with a 35 percent pulverized fly ash content. Network Rail accepted the recommendations, and they were incorporated into the project as key performance indicators. Adoption of these materials significantly lowers the embodied carbon of the station and bridge.

The nearby River Thames also helped by accommodating barges to carry 14,000 metric tons of materials to the site, and remove 8,000 tons. This saved the equivalent of 2,000 lorry journeys on London's roads and prevented the release of 9,000 kilograms of CO₂.

People Power

The new passenger platforms between the North Station entrance across the Thames to the south entrance provide effortless interchange between the National Rail line and the London Underground, with open, flowing spaces and natural light that floods the station from a curving glass façade punctuated by a glazed blue tower. The £550 million redevelopment is part of the wider £5.5 billion Thameslink program, which is improving stations, building new cross-London routes, and adding longer and more frequent trains to one of the busiest and fastest-growing stretches of railway in Europe.

Accomplishing this while making it an example of modern sustainable design required attention to every small detail and an appetite for using and improving worldwide best practices for stations and other large infrastructure projects.

Jacobs succeeded to such a degree that the Blackfriars Station redevelopment project was awarded a CEEQUAL Outstanding Achievement Award in 2013, the winner in the Energy and Carbon category.

The true winners are Londoners and their visitors, who, beginning in 2018, can take advantage of longer, more frequent trains, arriving at modern, sleek stations such as Blackfriars. ■



Our Culture

Our commitment to helping clients successfully achieve their sustainability goals is unwavering. We are equally committed to establishing sustainable practices in our own offices and contributing to the communities in which we live and work.



Solving our clients' toughest challenges and delivering measurable value are always our leading priorities. We deliver technical solutions that make a difference to our clients' social, economic, and environmental goals, resulting in a solid triple bottom line. We believe our project-delivery tools and processes contribute to better solutions for our clients, more efficiently executed projects, and longer-lasting, more energy-independent facilities in our communities.

We also know the work we do goes beyond projects. Our employees' adoption of our core values, culture of caring, and commitment to ethics and integrity

reinforces the way sustainability is woven into all that we do at Jacobs. That internal focus is the foundation that supports our external efforts, strengthens our services to our clients, and ultimately results in more sustainable solutions across the globe. Growing a strong, sustainable business allows us to provide the best possible services to our clients, who in turn are able to grow their businesses and meet their sustainable project goals wherever they do business, all around the world.

“Sustainability is broader than environmental responsibility; it's also a means of partnering with our clients that simultaneously brings us into partnership with our communities. Sustainability is important to our business as we strive for continual improvement to find smarter, better, and ultimately more life-cycle, cost-effective solutions for our clients.”

Nicole

*Jacobs, Senior Project Controls Specialist
Calgary, Alberta, Canada*



OUR CULTURE

Tools and Processes that Reinforce Sustainability

We support each phase of the project life cycle for our clients: plan, design, build, operate, and maintain. We also undertake research on behalf of our clients, and participate with clients and peers in endeavors to further contribute to sustainability in the professional services industry.

'The Business of Sustainability' Web Site

Jacobs recently contributed to the release of a landmark new tool to be used by the professional services industry in Australia to improve business sustainability.



The “Business of Sustainability” Web Site was launched in April 2014 by Consult Australia, an industry association representing consulting firms in the built and natural environment.

The project to develop the site was led by a task group comprised of some of Australia’s leading sustainability professionals from firms including SKM (now Jacobs), AECOM, Arup, Aurecon, GHD, Parsons Brinckerhoff, URS, and Norman Disney & Young.

A key feature of the Web site is its Decision Support Tool, designed to help bridge the gap between intent and achievement. The Decision Support Tool is structured across four broad-based activity areas: sustainable governance, reporting, and accounting; internal engagement and staff culture; collaboration and engagement; and technological improvements to offices and infrastructure.

A catalogue of questions—structured under the four activity areas—assists firms in identifying the path by which they are most likely to achieve their corporate vision.

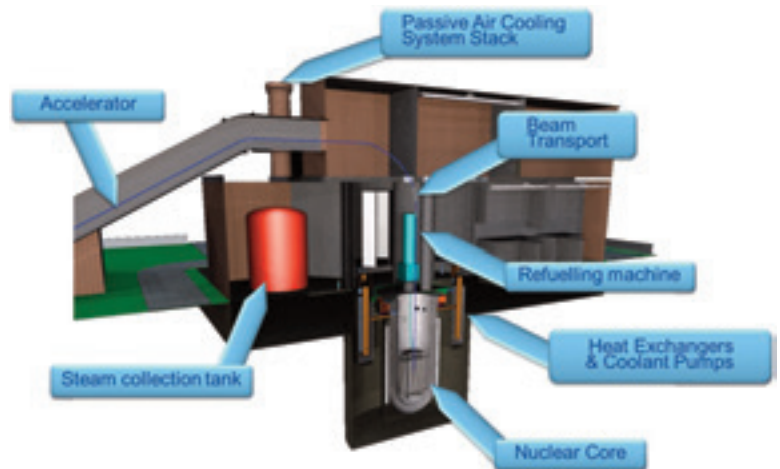
The Business of Sustainability site has been developed with particular focus on the needs of professional services firms including legal, accounting, finance, management, consulting, or government, for all sizes and disciplines, at any stage of their journey.

For more information visit www.thebusinessofsustainability.com.au.

Accelerator-Driven Thorium Reactor Power Station (ADTR™)

As part of our acquisition of the majority of the operations within Aker Solutions’ Process and Construction business in 2011, Jacobs took ownership of the ADTR™ 600-megawatt power station technology. We now own significant intellectual property related to the accelerator-driven, thorium-fueled, lead-cooled fast reactor, and have developed a business case demonstrating economic and market potential to stakeholders.

Partners are being pursued to take the project through to successful completion. Thorium is an attractive alternative to uranium fuel, as it is more abundant and does not need enrichment. Additionally, the ADTR power station can burn waste actinides generated in uranium-fueled reactors, providing sustainable energy for future civilization. Choosing a sub-critical accelerator-driven system provides safe operating margins for the thorium fuel cycle.



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Key points regarding thorium sustainability:

- Thorium is three- to five-times more abundant than uranium
- Need much less thorium than uranium for same power output
- Thorium is a byproduct of rare earth mining
- Minor actinides produced by a thorium reactor is less than from a conventional pressurized water reactor (PWR)

- Can be configured as a minor actinide “burner,” reducing long-term waste burden
- ADTR consumes about 50 percent of its plutonium starter over a 10-year cycle
- One ADTR can consume plutonium from approximately 1.5 PWRs
- Gaseous emissions are equivalent to conventional advanced systems
- Low carbon emissions

We recently presented the 2012 Telford Gold Medal¹ award-winning paper on ADTR at an Institution of Civil Engineers event in London, England, giving attendees a chance to discover more about the potential role ADTR technology offers to world energy production.

“Jacobs is involved in many industries and sectors; what we do impacts the lives of people throughout the world. Going beyond doing a great project, we strive to deliver solutions that meet the sustainability aspirations of the client, and that harness best practice and knowledge to use the Earth’s resources wisely and efficiently.”

Catriona

*Jacobs, Vice President
Glasgow, Scotland, United Kingdom*

Jacobs Safety Information Management System

Jacobs Safety Information Management System is our multilingual, Web-based system that tracks safety incidents, including environmental safety, around the globe. It supports analysis of incidents, reporting, follow-up, and sharing of lessons learned at project and office levels. All environmental incidents are recorded in the system, ensuring visibility, discipline, and a history of lessons learned.

¹The Telford Gold Medal is the highest prize awarded by the British Institution of Civil Engineers for a paper, or series of papers; it was introduced in 1835 following a bequest made by Thomas Telford, the organization’s first president.



OUR CULTURE

Business Management Framework

Our Business Management Framework provides a structure for the implementation of sustainability within an organization. A structured context allows for more ease in embedding sustainability into a business or organization. The approach is based on five key steps that allow us to work with our clients to approach sustainability in a structured and managed way, and has the ability to act as an audit tool to identify progress and gaps.

JSTEPS®

JSTEPS®, Jacobs System to Ensure Project Success, demonstrates repeatable service delivery, which is instrumental in achieving on-time and on-budget project delivery. JSTEPS is a flexible delivery system developed with the specific understanding that every client has unique needs. This tool can be customized to meet the needs of our clients in every industry we serve.

C-CLEAR

Our C-CLEAR energy-management and carbon-reduction tool was developed by our sustainability experts in the United Kingdom to use during project planning. C-CLEAR helps standardize our approach and focus project delivery efforts. The basic C-CLEAR method takes the project and client team through six steps: communicate, calculate, list, evaluate, agree, and review.

Eco-charrette

An eco-charrette uses the same intensive workshop setting as a typical charrette, but it focuses on the sustainable principles of the project rather than programming. Our high-performance eco-charrettes help clients identify and outline the first steps toward sustainable design, establish an all-inclusive project team, and create a vision for the project.

Building Information Modeling

Building Information Modeling (BIM) facilitates the complex processes and analyses associated with building performance and evaluation. We create models to predict building performance and prepare facility sustainability analyses using industry standards such as the United States Green Building Council's Leadership in Energy and Environmental Design. Linking BIM to analysis tools can provide immediate feedback for alternate design options that can help make a project more sustainable.

The Carbon Calculator

Originally developed in 2007 at the request of the Environment Agency in the U.K., the Carbon Calculator supports sustainability-related decisions for construction work. The tool calculates the embodied carbon dioxide of materials, plus CO₂ associated with transportation of those materials. Since its creation, Jacobs has continued to develop adaptations and additional uses for the Carbon Calculator so it may be used by more construction clients, contractors, and consultants for varied project needs.

Commissioning

Our commissioning services are designed to continually improve asset management and performance and play an important role in sustainable design. Commissioning at Jacobs goes beyond industrial facilities and buildings, and encompasses maintaining system performance of any asset that contributes to increased energy efficiency over the life cycle of the asset, which furthers the sustainable goals of our clients.

Resiliency Services

The number of U.S. Disaster Declarations has risen 47 percent in the last five years, causing significant social, business, and economic impacts felt worldwide. Jacobs helps position organizations to thrive after disaster. Our disaster preparedness and mitigation experts work shoulder-to-shoulder with our clients to evaluate and improve disaster resilience. Laser-focused commitment and our technical capabilities are especially beneficial for clients who work in high-hazard environments. We cannot prevent disasters, but we can help prepare for post-disaster continuity of operations and avoid or mitigate facility and infrastructure failures.

The challenges that arise from a disaster are innumerable, but rebuilding sustainably provides a unique opportunity to bring a durable benefit to the community. It increases efficiencies, drives down costs and decreases environmental impacts. We appreciate this balance of social, economic, and environmental considerations and strive to help all clients achieve sustainable recovery goals.

Keeping the benefits of sustainable recovery in mind, we offer the broadest services and global resources in the industry, and provide

OUR CULTURE

comprehensive solutions reducing disaster risks and impacts. Our services are focused into four functional areas:

- **Prepare:** Administrative and logistics readiness to save lives and limit disruptions to service and supply chains
- **Mitigate:** Harden facilities, max load infrastructure and ensure back-up power generation
- **Respond:** Promote life/safety, clear debris, restore utilities, conduct temporary repairs
- **Recover:** Plan and complete permanent infrastructure and facility repairs

JacobsValue+

Our JacobsValue+SM program is an intrinsic part of the way we do business. We constantly strive to develop the best, most cost-effective solutions for our clients, and JacobsValue+ supports those efforts every day. The program 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 JacobsValue+ is to deliver, measure, and demonstrate value to our clients by increasing their return on investment. In 2013, we saved or avoided more than \$6 billion for our clients.

JacobsSustainability+

Complementing JacobsValue+ is JacobsSustainability+SM, a data-capture tool designed by a global team of Jacobs' sustainability experts. Originally released in 2010, JacobsSustainability+ captures sustainable-related information specifically within the categories of carbon savings, green buildings, and energy incentives.

Usage of the tool across our operations continues to increase significantly year by year. We see more investment in the data captured and recorded, and many new ideas and suggestions for tool improvement. Using more advanced-measurement processes allows us to take lessons learned from the regions with the highest usage rates and apply them to regions where increased usage is desired.

In 2013, we saved 4.3 million metric tons of carbon for our clients through JacobsSustainability+.

Examples of innovative carbon or cost-saving solutions captured in JacobsSustainability+ include:

- For an energy client, we developed a methodology in which gas is recompressed prior to venting, therefore reducing the carbon footprint/output of the project. For this particular project, about 9,000 tons of CO₂ was saved by recompressing gas before venting.
- For a higher-education client, we helped design and implement a combined heat and power plant that achieved savings of \$1 million in its first month of operation.
- For an infrastructure client, we modified existing assets and constructed new pipelines, therefore removing the need for construction of a new concrete service reservoir. Through construction avoidance we were able to save 5,390 tons of carbon dioxide. Taking into account reduced operational carbon, the carbon impact of building alternative pipelines, and assumed asset life, the net carbon savings equaled 32,640 tons of CO₂.

We continue our efforts to ensure JacobsSustainability+ cultivates a stimulating environment for our project teams to develop ideas for the capture of sustainability-related data. Improving measurements and tracking are ongoing goals we work toward, fostering continual improvement.

Culture of Sustainability

In order to hone our outward focus for our clients, we must also focus inward, on our own efforts to advance sustainability at Jacobs. In 2013 we renewed our commitment to sustainable office space, energy savings, paper savings, carbon reduction, and more. We continued to make advancements in creating new learning opportunities for our employees, updated health and wellness programs, and saw yet another increase in our charitable giving program.

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A Top 100 Green Design Firm

Jacobs ranked number 12 for overall green firms in the *Engineering News-Record's* 2013 Top 100 Green Design Firms survey. In 2013 Jacobs had 649 third-party-accredited (LEED®, BREEAM, Estidama, Green Star) employees and \$71 million dollars in revenue related to sustainable projects.

We recently submitted data for the 2014 ranking and look forward to *ENR's* announcement soon. At the time of publication of this report, we employ 669 third-party-accredited professionals.

U.S. Green Building Council

Jacobs is a corporate member of the U.S. Green Building Council (USGBC). Our membership allows us to take advantage of ongoing educational opportunities, keep LEED credentials maintained for our staff, participate in discussions and knowledge-sharing, and access a variety of green building resources.

Internally, we have established a Sustainability Practice Council and a LEED User's Group to further embed sustainability into our integrated practice. The LEED User's Group discusses all aspects of green building and sustainability from the built and existing environment. We focus on reducing the impact of the building design, construction, and operations industry within our own offices and for our clients. We discuss internal reporting strategies such as the Architecture 2030 Challenge, the AIA 2030 Commitment, and U.S. Internal Revenue Service Section 179D tax incentives for energy-efficient buildings and third-party certifications that include the USGBC LEED rating system.

Our team supports sustainable projects worldwide and strives to maintain high consistent standards while embracing environmental and energy efficiency goals.

One project recently certified LEED Gold is the Los Alamitos Army Reserve Center (LAARC) in Los Alamitos, Calif., USA. The LAARC is located on six-acre and eight-and-a-half-acre sites at the Joint Forces Training Base in Los Alamitos. We designed the facility to provide a net-zero training facility, and it was recently awarded LEED-NCv2.2 Gold rating.

This complex of buildings provides space for conducting individual and collective battle-staff training for the U.S. Army Reserve 63rd Regional Support Command. Primary facilities include an Army Reserve Center (ARC), an Organizational Maintenance Shop (OMS), an Unheated and Unit Storage Building, and parking areas for military and privately owned vehicles.

The 52,500-square foot ARC consists of a 400-member training facility with administrative areas, educational spaces, assembly hall, kitchen, fitness center, library, and learning centers (classrooms) for 19 Army Reserve units.

The separate 10,100-square-foot OMS includes four work bays with a 20-ton bridge crane, wash rack, and support for maintenance administration staff. The 32,100-square-foot Unheated and Unit Storage Building includes a weapons simulator and arms vault, unit storage, administrative space, and unheated storage. Additional components include site work, a 379-kilowatt photovoltaic



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car canopy system, paving, walks, curbs, gutters, retention basin, storm drainage, landscaping, information systems, and parking.

Sustainable principles were integrated into the design, development, and construction of the project, and the facility is designed to comply with the Americans with Disabilities Act.

Architecture 2030 Challenge

In 2010, Jacobs adopted the Architecture 2030 Challenge. Architecture 2030 is a U.S.-based nonprofit, 501(c)(3) research organization that, after much research, developed and then issued the 2030 Challenge in January 2006. The 2030 Challenge is specifically focused on lowering building energy consumption and greenhouse gas emissions.

The challenge contends that buildings are the major source of global demand for energy and materials that create by-product greenhouse gases (GHG). Slowing the growth rate of GHG emissions and then reversing it are, therefore, key to addressing climate change and keeping global average temperature below 2° Celsius above preindustrial levels.

To accomplish this goal, the Architecture 2030 Challenge asks the global architecture and building community to adopt the following targets:

- All new buildings, developments, and major renovations shall be designed to meet a fossil-fuel, GHG-emitting, energy-consumption performance standard of 60 percent below the regional (or country) average for that building type.
- At a minimum, an equal amount of existing building area shall be renovated annually to meet a fossil-fuel, GHG-emitting, energy-consumption performance standard of 60 percent of the regional (or country) average for that building type.
- The fossil-fuel reduction standard for all new buildings and major renovations shall be increased to:
 - 70 percent in 2015
 - 80 percent in 2020
 - 90 percent in 2025
 - Carbon-neutral in 2030 (using no fossil-fuel, GHG-emitting energy to operate)

To further our participation and educational efforts around the 2030 Challenge, we've recently started noting energy use intensity (EUI) numbers on many of our project write-up sheets.

The number indicates the EUI of the project as designed, as well as a baseline for the project type. This metric is used in our reporting to the AIA for the 2030 Challenge. We have just completed our third year of posting metrics to the AIA.

The ultimate goal is 100 percent fossil-fuel reduction by 2030.

Energy Efficiency Tax Deductions

Jacobs has contracted with Alliant Group to pursue energy tax deductions under the U.S. Internal Revenue Code (IRC) Section 179D tax incentives for energy-efficient buildings. The deduction is for energy-efficient building systems such as lighting, HVAC, or the building envelope and ranges from \$0.30 to \$1.80 per square foot. The most common deduction is \$0.60 per square foot for energy-efficient light fixtures.

What is it?

The U.S. Energy Policy Act of 2005 (Public Law 109-58) created a tax deduction for constructing energy-efficient buildings. The expiration of this tax deduction was extended to Dec. 31, 2013, by the Emergency Economic Stabilization Act of 2008. Jacobs is currently targeting qualifying government projects placed in service between Jan. 1, 2010, and Dec. 31, 2013.

What does it mean for Jacobs?

Jacobs, as engineer and architect of record, project manager/construction manager (PMCM), commissioning agent, and LEED consultant can claim the tax deduction under Section 179D for projects owned by federal, state, or local government if the contracting government entity assigns the deduction to Jacobs. A signed statement from the government project owner assigning the deduction to Jacobs is required. Essentially, Jacobs takes the tax deduction in lieu of the government project owner, who does not pay taxes. This program continues to be robust as we have a number of government clients owning energy-efficient and LEED-rated building projects, including public universities and military facilities. Jacobs anticipates \$6.8 million in tax deductions to date, which equates to approximately \$2.3 million in corporate tax refunds.

OUR CULTURE



Irvine office, California, USA



Manchester office, England, United Kingdom



Denver office, Colorado, USA

Energy Efficiency Awareness Through Real-time Technology

Last year Jacobs' Irvine, California, USA, office (LEED Platinum CI) launched our first real-time energy tracking monitor for two sub-metered office floors. Benefits were immediate, as employees began modifying their energy-efficiency habits.

Now in our second year of energy tracking in the Irvine office, we see continued positive results. We are averaging approximately 1,250 metric tons of CO₂ per year in savings for the office with electricity.

In the future, this initiative could lead to implementing a pilot energy monitoring program in which monitoring devices are placed in various offices companywide, and actual energy usages are tracked over time.

Additional Tools and Training

Our staff is able to take advantage of several educational programs related to sustainable buildings. Participation is not limited to our Buildings market staff, but encouraged for all employees companywide.

- USGBC Continuing Education Series
- BuildingGreen Suite
- LEED User
- GreenWizard WORKflow PRO®
- Sefaira Concept and Sefaira for SketchUp

Sustainable Facilities: Jacobs Offices

Many of our offices are already certified through the various systems that are applicable in the countries in which we live and work. For example, in the United States, offices are certified through the USGBC's LEED program. In the U.K., the Building Research Establishment Environmental Assessment Methodology (BREEAM) rating system is used, and in Australia the National Australian Built Environment Rating System (NABERS) is the standard. We are proud of our offices that have already received certification and have more working toward that goal, worldwide, every day.

A few examples include:

- The new Jacobs' Manchester office building in Manchester, England, United Kingdom, has a BREAAAM "Excellent" rating and is well-placed for rail and public transport access, while the Jacobs Winnersh Triangle office in Berkshire, England, United Kingdom, recently received a BREAAAM "Very Good" rating.
- Our Denver, Colorado, USA office recently received LEED Platinum certification, the highest level of certification that can be achieved through USGBC. The office occupies floors 23-25 and 38-40 of an existing 42-story building, with 129,660 square feet of commercial interior office space. The project scope included enhanced commissioning, green education, and 20.04 percent recycled content.

OUR CULTURE

- In Australia, our Christie Street office in Sydney has a NABERS 6 Star rating, while our Durack Street office in Perth has a 4.5/54 star NABERS rating.
- LEED certification is pending in our Jacobs Quarry Park, Calgary, Canada office. Over the last 18 months a waste management program has been successfully implemented, and the diversion of organic materials from landfill has increased from an initial 935 pounds per month, to 4,788 pounds per month. An average of 525 pounds of mixed recycling is being diverted each month, and, to date, 528 metric tons of carbon savings have been recognized.

Print Sustainability Statement 2013

The Jacobs print program has grown by volume and project growth in 2013 in all of our existing geographies. Based on previous expectations of growth, we can confirm that our goals were achieved in the replacement of equipment and print sustainability arena. SKM, whom we acquired early in fiscal year 2014, is already aligned with the principles of our print program, and also brings significant additional opportunities to review and refresh equipment and further reduce waste. Through the introduction of new print tracking/control initiatives we have also made inroads into reducing committed print volumes in 2013.

By the Numbers

Our paper savings for 2013 reached 38.5 million pages, equating to 77,260 reams (214 tons and 34,635 trees saved) in production, which directly reduces CO₂ emissions and effluent output. Our duplex global average per month is now 2.22 million on a print volume of 16.5 million pages. Even higher volumes of our paper supply now come as recycled or from sustainable sources. Scanning of documents to digital format and subsequent storage has also increased in 2013, leading the way toward reduced future printing/environmental impact. Many of our accounting processes now use digital authorization, which also leads to a reduction in physical printing output. Energy-saving measures continue to be employed on all of the managed print devices in the program, including automatic standby and switch off, which equates to a 30 percent power reduction across the globe.



Sydney office, New South Wales, Australia



Calgary office, Alberta, Canada

Expanding the Program: Clients Included

All new offices, project sites, and acquired companies are educated on the principles of our program, and encouraged to adopt principles and contracts to help expand the success of our existing initiative. Adoption of the program adds value and supports our JacobsSustainability+ initiative. Reviewing the trends in early 2014, we see increased savings and are encouraged that 2014 may exceed the targets set for 2013 in all areas of the program.

Drive Less Initiative

We continue to improve and expand our Drive Less Initiative, which focuses on improving safety, reducing and eliminating motor-vehicle incidents, reducing our miles driven, and reducing many of the negative environmental impacts associated with driving.

We ask all employees to evaluate alternatives to driving while on company business: conference calling, WebEx conferencing, video conferencing, public transportation, carpooling, taxi, walking, or bicycling. When traveling, we recommend employees choose lodging close to their destination, and suggest they consider nearby restaurants and other services.

Drive Less plans are currently in place at many of our offices. Where plans are complete, program

OUR CULTURE

information is available on the local office's page on our intranet site. As plans are implemented in more of our offices, we anticipate a greater reduction in motor-vehicle incidents and further reduction of our carbon footprint.

Safety and BeyondZero®

Safety is a top priority at Jacobs, and elemental to everything that matters to us. The three core values that shape our conduct around the world balance (1) our relationships with clients, (2) profitable growth, and (3) the people who make us successful. All three values depend on our ability to run a safe and ethical business.



Our BeyondZero® program does more than promote an incident- and injury-free workplace. BeyondZero goes beyond rules, policies, and procedures to promote a genuine culture of caring throughout Jacobs. We encourage all Jacobs employees to work safely, take an active role in the safety of those around them, and have the courage to intervene whenever they deem something unsafe. BeyondZero is 24/7 for us: at Jacobs, at client sites, at home, and in our communities. We believe we can profoundly influence the safety of our employees, their friends and families, our communities, and our industry.



BeyondZero played a significant role in Safety Week 2014, which we mentioned earlier in this report. We are proud to have been part of this first annual Safety Week 2014, an initiative of 31 national and global construction firms that joined forces with a single aim: to inspire everyone in the industry to be leaders in safety.

The official Safety Week dates were May 4-10, 2014. We took this opportunity to publicly restate our commitment to safety, internally and externally. A variety of events, activities, and discussions took place throughout our organization, including lunchtime learning sessions, testing personal protective equipment, and presentations of safety toolkits for each day of the week:

An especially inspiring part of Safety Week was the many "safety selfies" submitted by our employees around the world, demonstrating their commitment to safety and our BeyondZero culture.

"Being safe is elemental to everything we do and everything that matters to us. As a company, we are committed to reaching everyone we encounter with our BeyondZero message, because we genuinely care about the safety and well-being of our employees, clients, and all the people they're connected to around the world."

Craig Martin
Jacobs, President & CEO



OUR CULTURE

Education

Jacobs Foundation Scholarship

We introduced the Dr. Joseph J. Jacobs Global Scholarship Program in 2009 in memory of our founder, Dr. Joseph J. Jacobs. His vision, leadership, and commitment to our business helped make this company one of the world's largest and most diverse providers of technical, professional, and construction services. Over the last five years, the Jacobs Engineering Foundation has awarded 100 academic scholarships of \$3,000 each from more than 1,700 applications received. We are proud to offer this opportunity year after year, and look forward to many more applicants in years to come.

The program is independently administered by Scholarship Management Services, a division of Scholarship America, a nonprofit educational-support and student-aid service organization.

Jacobs College

Established in 1993, Jacobs College offers educational opportunities to our employees for 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.

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



Goals of Jacobs College:

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

Employee Charitable Giving 2013

2013 saw continued growth in Jacobs' U.S. Employee Charitable Giving Program. The giving season kicked off in August with a donation to charitable partner America's Charities in



OUR CULTURE



recognition of Jacobs' 10-year partnership with UnitedHealthcare. For the second consecutive year, total donations exceeded \$1.19 million.

Several years ago we implemented an online employee giving system that eliminated manual input of thousands of paper forms. The efficiency of the online system also expanded donor choice, making it easy for employees to give to one or multiple charities in just a few clicks of the mouse. Employees in 98 Jacobs locations donated in 2013, a 48 percent increase in locations from the prior year. Several Texas offices led the way, donating a combined total of more than \$577,000. Other top donor locations in the U.S. that raised funds ranging from \$50,000 to more than \$100,000 include offices in Louisiana, South Carolina, Missouri, and Tennessee.

Our online giving options continue in the United Kingdom, too. Last year our U.K. offices launched the Charities Aid Foundation's (CAF) "Give As You

Earn" program. The system allows employees to give to more than 160,000 registered U.K. charities or to the charitable cause of their choice locally, nationally, or internationally. Our employee contributions continue to grow as we streamline this program.

Local United Ways and their member organizations remain the largest recipients of employee dollars across the U.S. Donation distribution has grown from 16 United Ways in 2010 to 86 United Ways and four additional charitable partners: America's Charities, Global Impact, American Cancer Society, and American Heart/Stroke foundations.

One dollar at a time, our employees are making a difference with donations to 545 nonprofit organizations representing a variety of needs and interests from children and family services, veteran support and international relief, to the environment, animal welfare, and the arts. ■

Project Gallery

Our sustainable services, principles, and practices cross all market sectors and geographic boundaries, and they are designed to help our clients achieve success.



ARCHER WEST CONSTRUCTION/SOUTH FLORIDA WATER MANAGEMENT DISTRICT



L-8 Reservoir: pump station and in-flow control structure
Palm Beach County, Florida, USA

Design services

- Project designed to capture stormwater flows, store for dry season hydration of stormwater treatment areas
- Helps deliver clean water flows to Everglades, results in downstream environmental restoration
- No new land impacted by construction of reservoir
- Pumping system for project includes electric in lieu of diesel driven pumps; reduces carbon emissions
- More than 30 acres of reinforced turf installation on reservoir embankments minimize runoff and reflective heat
- Roller Compacted Concrete utilizes site produced aggregate materials; natural moisture content minimizes need for added water to the mix



AUSTRALIA PACIFIC LNG (JV BETWEEN ORIGIN, CONOCO PHILLIPS AND SINOPEC)



Queensland CSG and LNG
Brisbane, Australia

Worked closely with senior managers to design and facilitate sustainability targets workshop, and produce subsequent report

- Specific sustainability targets for five themes: water, environment and land, workforce, society, GHG/Energy
- Quantifiable targets and action plans developed
- Project aims to go beyond compliance; leave legacy

Photo courtesy of APLNG

PROJECT GALLERY



GÖTEBORG ENERGI



GoBiGas (Göteborg Biomass Gasification) project
Gothenburg, Sweden

Engineering, procurement, and construction
management (EPCM) services

- 20MW Synthetic Natural Gas (Bio-SNG) pilot plant
- Designed to convert forest residue into biogas (SNG) and heat
- Goal to obtain high overall energy efficiency
- Target 65 percent energy originating from biofuel to end up in the produced Bio-SNG



HASKELL/JEA



Total Water Management Plan (TWMP)
Segment 2 River Crossing
Jacksonville, Florida, USA

Conceptual design, final design, permitting and
services during construction

- Alternative project solution utilized single horizontal directional drill (HDD) rather than two HDD
- Environmental risks and extra costs averted
- Minimized project impact on public/community
- Honorable Mention in 2013 Trenchless Technology Projects of the Year in New Installation category

“In the rapidly expanding markets of the Middle East, we have limitless opportunities to support our client’s capital investments, and are dedicated to creating a sustainable business founded on excellent in-country project delivery. Through our project performance, we utilize our global experts to transfer their knowledge and experience to develop and nurture the talents of our local resources, resulting in local, sustainable centers of expertise.”

April

*Jacobs, Regional Performance Improvement and
Quality Manager, Middle East
Saudi Arabia*



PROJECT GALLERY



LONDON BOROUGH OF HAVERING



MyPlace New Carbon-neutral Youth and Community Facility
Harold Hill, Romford, England, United Kingdom

Project management, design, contractor selection, construction management, and sustainable services for design and build

- Carbon-neutral facility
- Natural lighting supplemented by super-efficient light-emitting diodes powered by a 33.5-kilowatt array of photovoltaic cells
- Building frame predominately laminated timber made from sustainably harvested wood; insulation far exceeds requirements



RENMATIX



Headquarters and Technical Center
King of Prussia, Pennsylvania, USA

Programming, space planning, interior design, contract documents, mechanical, electrical, and plumbing engineering services

- Sustainable materials used throughout workspace
- Clerestory windows bring in light
- Natural wood on pergolas, screens, and walls
- Water and agriculture alluded to through interior color, style
- Open office concept



PIMA COUNTY



Ina Road Water Reclamation Facility Upgrade Project
Tucson, Arizona, USA

Project management and construction inspection services

- Portion of electricity to heat plant provided by 1 MW solar system adjacent to project site.
- Highly treated plant effluent discharged into Santa Cruz River; used to recharge area groundwater
- Anaerobic digesters produce methane gas, used to operate on-site boilers for process and heating
- Biosolids from treatment process land applied to farmland in Pima County; supplement soil moisture and provide nutrients to crops



SUNCOR ENERGY

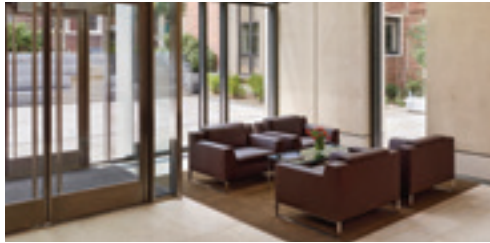


Tailings and Water Transfer Project
Calgary and Fort McMurray, Alberta, Canada

Engineering, procurement, and field support for Front-end Engineering Design (FEED), detail engineering, and construction support phases

- Improves oil sands energy efficiency
- Mitigates greenhouse gas emissions
- Nonconventional energy source
- Reduces environmental footprint
- Corporatwide energy management system

PROJECT GALLERY



UNIVERSITY OF PENNSYLVANIA – THE WHARTON SCHOOL



Steinberg Hall-Dietrich Hall Addition
Philadelphia, Pennsylvania, USA

Architecture, interior design, mechanical, electrical, and plumbing engineering, fire alarm, fire protection, structural and site/landscape design

- New VAV air system serves addition; economizer mode saves energy
- Green roof/white roof
- Drought tolerant plants: 50 percent irrigation reduction
- Energy reduction: 20 percent
- Water efficient fixtures: 20 percent reduction
- Construction waste: 98 percent diverted from landfill
- Recycled content used on project: 20 percent



U.S. ARMY CORPS OF ENGINEERS, ALASKA DISTRICT



F-22 Recovery, Remediation, and Restoration
Alaska, USA

Recovery, remediation, and restoration of a secure site

- Critical time response on project
- Recovery of materials from site
- Full site remediation
- Under budget, on schedule project completion

“Jacobs’ multidisciplinary delivery model capitalizes on our ability to integrate the principles of sustainability during project execution, thereby helping our clients to achieve their corporate sustainability objectives and maximizing the value our business can have on protecting, conserving, and enhancing the natural environment.”

Eddie

*Jacobs, Technical Director,
Sustainability & Environment
Al Khobar, Saudi Arabia*



PROJECT GALLERY



U.S. ARMY CORPS OF ENGINEERS, ALASKA DISTRICT



New Facility at Torii Station
Torii Station, Okinawa, Japan

Direct oversight of archeological investigations

- Large-scale archaeological excavation
- Excavation of approximately 2,100 square meters
- Shellmound and Gusuku artifacts and archaeological features discovered
- All artifacts and cultural features fully recorded



WOODALL RODGERS PARK FOUNDATION



Klyde Warren Park
Dallas, Texas, USA

Engineering and financial feasibility studies, schematic design, park planning, traffic analysis, cost estimates, preliminary concepts for structural and civil components, detail design, utility relocation

- High-efficiency LED lighting, fixtures with solar panels and dimmers reduce energy consumption during off-peak hours; saving approximately 142,454 kilowatt-hours and approximately \$9,590 annually
- Trees, shrubs, and varied species of groundcover/perennials sequester an estimated 18,500 pounds of CO₂ annually
- Newly planted trees intercept 23,466 gallons of stormwater runoff for every storm event through canopies



U.S. ARMY CORPS OF ENGINEERS DODEA DESIGN CENTER



Fort Campbell High School (FCHS)
Fort Campbell, Kentucky, USA

Programming and design services

- Designed to meet LEED Silver Certification
- Sustainable design development practices that remained within budget; provided overall energy reduction and water use reduction of 40 percent
- Photovoltaic renewable energy systems and daylight maximization evaluated through extensive life cycle cost analysis
- Digital dashboards track building's sustainable performance; available as a project-based learning tool
- Underground stormwater retention expected to mitigate runoff by 25 percent

PROJECT GALLERY

Projects from Client Features



ENVIRONMENT AGENCY



Medmerry Managed Realignment Project
Medmerry, West Sussex, England, United Kingdom

Strategic assessment, outline design, preparation of the business case, environmental assessment, detailed design and supervision of construction. Design included hydrodynamic modeling, landscape design, and stakeholder engagement

- Lessens flood risk; makes communities safer
- Direct flood protection for 348 properties and the only road serving 5,000 households
- New saltwater marsh creates habitat for protected species
- Alternative flood control solution avoids about £250,000 in repairs per year



CHICAGO DEPARTMENT OF AVIATION



O'Hare Runway 10C-28C and Associated Taxiways
Chicago, Illinois, USA

Design of pavements, lighting, marking, signage, grading, drainage, NAV/AIDS, phasing, demolition, FedEx Apron, and bidding and construction support services

- 100 percent of materials obtained locally for Berms 5 & 6 Relocation Project
- Solar-power lighting saved hundreds of thousands of dollars in construction cost for Runway 10C-28C Center Package
- Diversion of 100 percent of construction waste (630,000 tons) from landfills for Cargo Area Site Prep and Interim Ditch Project



HONG KONG GOVERNMENT/GEOTECHNICAL ENGINEERING OFFICE



Landslip Prevention and Mitigation Program
Hong Kong

Prevention measures, mitigation strategies, development of best-practice guidelines

- Prevents and mitigates landslides; communities are safer
- Trees, vegetation provide environmentally friendly, cost-effective erosion control
- In 2012 number of landslides reduced by almost half from 2011
- Project received GEO Bronze Award for landscape treatment in the natural terrain catchment category
- Project received GEO Silver Award in the landscape treatment of man-made slope/retaining wall category



HUMBERSIDE POLICE AUTHORITY



Clough Road Police Station and Custody Facility
Hull, England, United Kingdom

Project management, architecture, and multidisciplinary consultancy services

- BREEAM Excellent rating
- Energy provided by biomass boilers, helical wind turbines, photovoltaic solar panels
- Green rooftops with plants increase thermal mass, promote biodiversity
- Combination of renewable energy, highly insulated building reduces monthly energy use by a third
- Brownfield site used; sustainable alternative to new site purchase

PROJECT GALLERY

Projects from Client Features



NORTH CAROLINA STATE UNIVERSITY



Cates Cogeneration Plant
Raleigh, North Carolina, USA

Architecture and engineering design services

- Reduces greenhouse gas emissions by 8 percent
- Increases efficiency by more than a third
- Saves more than \$4.3 million per year in operating costs.
- Propels North Carolina State University toward goal of climate neutrality by 2050
- Project submitted for LEED Gold certification (award pending)



EAST MIDLANDS DEVELOPMENT AGENCY (NOW HOMES AND COMMUNITIES AGENCY)



Avenue Coking Works
Chesterfield, England, United Kingdom

Design and contract administration services

- Largest remediation project in Europe
- Remediation strategy uses on-site treatment and material re-use; minimizing waste to landfill
- Ecological habitat enhancements
- Received interim CEEQUAL3 assessment "Excellent" award
- More than £9.1 million in cost savings recorded for client
- Sustainable-related activities led to carbon savings of 6,074 tons



NETWORK RAIL



Blackfriars Station and Bridge Redevelopment
Refurbishment
London, England, United Kingdom

Design services

- Signature station; leads way in designing public structures for long-term sustainability
- 6,000-square-meter roof spans River Thames, design embeds more than 4,400 solar panels
- Largest solar bridge in the world; largest solar array in London
- Solar panels designed to generate up to half the station's energy; reduce carbon dioxide emissions by 550 metric tons per year
- CEEQUAL Outstanding Achievement Award in 2013; winner in Energy and Carbon category

Unshakable Sustainability

Ur core values are the unshakable foundation that furthers our growth as a business as well as our commitment to sustainable development.

Sustainability is ingrained in our projects and business practices as well as in our people and our culture. The many and varied ways we help our clients attain their sustainable project goals allow you to see our philosophy in action.

We See Sustainability Differently.

GRI Index

GRI Sustainability Reporting Guidelines Version 3.1

GRI Criterion #	Description	Section
Strategy & Analysis		
1.1	Statement from the most senior decision-maker of the organization about the relevance of sustainability to the organization and its strategy.	Executive Letter
1.2	Description of key impacts, risks, and opportunities.	Executive Letter
Organizational Profile		
2.1	Name of the organization.	Appendix
2.2	Primary brands, products, and/or services.	Appendix
2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures.	Appendix; www.jacobs.com
2.4	Location of organization's headquarters.	Appendix
2.5	Number of countries where the organization operates.	Appendix
2.6	Nature of ownership and legal form.	Appendix
2.7	Markets served (including geographic breakdowns, sectors served, and types of customers/beneficiaries).	Appendix
2.8	Scale of the reporting organization.	Appendix
2.9	Significant changes during the reporting period regarding size, structure, or ownership.	Appendix
2.10	Awards received in the reporting period.	Feature Stories and Project Gallery, if applicable.
Report Parameters		
3.1	Reporting period (e.g., fiscal/calendar year) for information provided.	Appendix
3.2	Date of most recent previous report (if any).	Appendix
3.3	Reporting cycle (annual, biennial, etc.).	Appendix
3.4	Contact point for questions regarding the report or its concerns.	Appendix
3.5	Process for defining report content.	Appendix
3.6	Boundary of the report.	Appendix
3.7	State any specific limitations on the scope or boundary of the report.	Appendix
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.	Appendix

GRI INDEX

GRI Criterion #	Description	Section
3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report. Explain any decisions not to apply, or to substantially diverge from, the GRI Indicator Protocols.	Appendix
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).	Not Applicable
3.11	Significant change from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	No changes
3.12	Table identifying the location of the Standard Disclosures in the report.	GRI Index
3.13	Policy and current practice with regard to seeking external assurance for the report.	Appendix
Governance, Commitments, and Engagement Governance		
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.	Appendix; www.jacobs.com
4.2	Indicate whether the Chair of the highest governance body is also an executive officer.	Appendix; www.jacobs.com
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.	Appendix; www.jacobs.com
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	Appendix; www.jacobs.com
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance).	Appendix; www.jacobs.com
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	Appendix; www.jacobs.com
4.7	Process for determining the qualifications and experience of the highest governance body for guiding the organization's strategy on economic, environmental, and social topics.	Appendix; www.jacobs.com
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	Appendix
4.9	Procedures for the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.	Appendix; www.jacobs.com
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	Appendix; www.jacobs.com
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	Appendix
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	Appendix

GRI INDEX

GRI Criterion #	Description	Section
4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organizations in which the organization: * Has positions in governance bodies; * Participates in projects or committees; * Provides substantive funding beyond routine membership dues; or * Views membership as strategic.	Appendix
4.14	List of stakeholder groups engaged by the organization.	Appendix
4.15	Basis for identification and selection of stakeholders with whom to engage.	Appendix
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	Appendix
4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.	Appendix
Economic		
Economic Performance		
EC1	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. (Core)	Appendix
EC3	Coverage of the organization's defined benefit plan obligations. (Core)	Appendix
EC4	Significant financial assistance received from government. (Core)	\$0
Market Presence		
EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation. (Core)	Partial Report, Appendix
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. (Core)	Appendix
Environmental		
Materials		
EN1	Materials used by weight or volume. (Core)	Appendix
EN2	Percentage of materials used that are recycled input materials. (Core)	Appendix
Energy		
EN5	Energy saved due to conservation and efficiency improvements.	Our Culture
EN6	Initiatives to provide energy-efficient or renewable energy-based products and services, and reductions in energy requirements as a result of these initiatives.	Our Culture; Appendix
EN7	Initiatives to reduce indirect energy consumption and reductions achieved. (Additional)	Our Culture; Appendix

GRI INDEX

GRI Criterion #	Description	Section
Biodiversity		
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas. (Core)	None
Emissions, Effluents, and Waste		
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved.	Our Culture; Appendix
Products and Services		
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation. (Core)	Our Culture; Appendix
Social Performance: Labor Practices & Decent Work		
Employment		
LA1	Total workforce by employment type, employment contract, and region. (Core)	Appendix
LA2	Total number and rate of employee turnover by age group, gender, and region. (Core)	Appendix
LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations. (Additional)	Appendix
LA4	Percentage of employees covered by collective bargaining agreements. (Core)	Appendix
Occupational Health and Safety		
LA6	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs. (Additional)	Appendix
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region. (Core)	Injury Rate – 0.42; Occupational Disease Rate – 0.003; Lost Day Rate – 0.078; Days Lost – 2,208 Absenteeism: do not track
LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases. (Core)	Appendix
Training and Education		
LA10	Average hours of training per year per employee by employee category. (Core)	Appendix; Our Culture
LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings. (Additional)	Appendix; Our Culture
LA12	Percentage of employees receiving regular performance and career development reviews. (Additional)	Appendix; Our Culture

GRI INDEX

GRI Criterion #	Description	Section
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. (Core)	Partial Report; Appendix
Social Performance: Human Rights		
Investment and Procurement Practices		
HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening. (Core)	Appendix
HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken. (Core)	Appendix
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained. (Additional)	Appendix
Child Labor		
HR6	Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor. (Core)	Appendix
Forced and 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. (Core)	Appendix
Security Practices		
HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations.	Appendix
Social Performance: Society		
Corruption		
SO2	Percentage and total number of business units analyzed for risks related to corruption. (Core)	Appendix
SO3	Percentage of employees trained in organization's anti-corruption policies and procedures. (Core)	Appendix
SO4	Actions taken in response to incidents of corruption. (Core)	Appendix
Public Policy		
SO5	Public policy positions and participation in public policy development and lobbying. (Core)	Appendix
Anti-Competitive Behavior		
SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes. (Additional)	None

GRI INDEX

GRI Criterion #	Description	Section
Social Performance: Product Responsibility		
Products and Service Labeling		
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction. (Additional)	Appendix
Marketing Communications		
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship. (Core)	Appendix
PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes. (Additional)	None
Customer Privacy		
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data. (Additional)	None
Compliance		
PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services. (Core).	\$0

The following lists the GRI criterion that we have determined are either not material to our stakeholders, or we are not prepared to report on at this time:

EC2, EC5, EC6, EC9, EN3, EN4, EN8, EN9, EN10, EN12, EN13, EN14, EN15, EN16, EN17, EN19, EN20, EN21, EN22, EN23, EN24, EN25, EN27, EN28, EN29, EN30, LA5, LA9, LA14, HR4, HR5, HR9, SO1, SO6, SO8, PR1, PR2, PR3, PR4

Appendix

ORGANIZATIONAL PROFILE

Jacobs Engineering Group Inc. is one of the world's largest and most diverse providers of technical, professional, and construction services, including all aspects of architecture, engineering, and construction, operations and maintenance, as well as scientific and specialty consulting. We serve a broad range of companies and organizations, including industrial, commercial, and government clients across multiple markets and geographies.

Our global network includes more than 200 offices in more than 25 countries, with operations in North America, South America, Europe, the Middle East, India, Australia,

Africa, and Asia. We were founded in 1947 and our headquarters is in Pasadena, California. In 2013 we reached 70,000 employees.

Jacobs' common stock has been publicly held since 1970 and is currently listed on the New York Stock Exchange under the trading symbol JEC. In 2013 we had revenues of \$11.8 billion, net earnings of \$423.1 million, backlog of \$17.2 billion, cash of more than \$1.2 billion, and a diluted EPS of \$3.23.

For more information about Jacobs' sustainable practices or to comment on this report, please contact us at: contactus@jacobs.com.

Countries Where We Have a Presence

Australia	Greece	Puerto Rico
Belgium	India	Saudi Arabia
Brazil	Ireland	Scotland
Canada	Italy	Singapore
Chile	Mexico	South Africa
China	Morocco	Spain
Czech Republic	Netherlands	Sweden
England	Northern Ireland	United Arab Emirates
Finland	Oman	United States of America
France	Peru	Wales
Germany	Poland	



Market Sectors

Aerospace & Defense	Environmental, Water & Wastewater	Mission-Critical & High-Tech Facilities	Power & Utilities
Automotive & Industrial	Food, Beverage, Forest & Consumer Products	Oil & Gas	Refining & Petrochemical
Buildings	Mining & Minerals	Pharmaceuticals & Biotechnology	Transportation
Chemicals			

SUSTAINABLE SERVICES

EPCM

BREEAM / LEED
 CEEQUAL
 Master planning
 Sustainability assessments
 Life cycle reviews
 Energy efficiencies
 Materials selection (incl. carbon)
 Sustainable design
 Commissioning

Corporate Responsibility

Verification
 Auditing
 Management systems
 Waste minimization

Carbon 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

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REPORT PARAMETERS

Reporting Period/Most Recent Report/Report Cycle/Point of Contact

In this *Sustainability Report* we use the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines. We report only on the G3.1 indicators that were relevant and measurable for our business operations in 2013. The report is inclusive of data from Jacobs and all related entities, with no limitations. See our investor relations section at www.jacobs.com for more information. This report has not been audited by a third party (e.g., GRI, etc.). Prior to our 2014 report, our most recent report was published in 2013. We publish a Sustainability Report annually. Content for this report was defined based on GRI requirements and the needs of our stakeholders. For more information about Jacobs and this Report please contact: contactus@jacobs.com.

Report Scope & Boundaries

Jacobs stakeholders expected to use this report include clients and potential clients, shareholders, and employees. Topics reported on are selected and prioritized to relate and reinforce Jacobs' view on sustainability. These include feature stories on projects and clients, a project gallery with specific details on sustainable elements, tools and processes used by the Company, and examples of internal application of sustainable methodologies from LEED certification of offices to charitable giving campaigns and more.

Any material economic, environmental, and social impacts of the organization not addressed herein will be evaluated and possibly covered in future reports in the coming year or two.

Data Measurement Techniques & the Basis of Calculations

Jacobs' data measurement techniques and basis of calculations vary according to the entity to which we report. We adhere to all rules and regulations for the various agencies and governing bodies to which we report on topics, including safety, earnings, and more. Additional data and calculation basis vary by specific tool, science, or methodology used, which is dependent on the client, the project, and the project requirements.

Assurance

No external assurance of the Sustainability Report has been sought.

BUSINESS CONDUCT & ETHICS

Corporate Policy Concerning Business Conduct, Integrity, & Ethics

Our founder, Joseph J. Jacobs, once wrote that honesty has remained a constant driving force of our success. He believed our principles of business conduct sustain our company culture and are recognized and awarded by our clients and by the market system. As he wrote in our 50th anniversary booklet, "Our high standards provide the structure that will bridge past success with a bright future."

From the day they are hired, Jacobs employees are given the tools they need to understand and adhere to our ethical standards. New employee orientation includes foundation training for all employees on our Business Code of Conduct. Each year our staff employees are required to review the Business Code of Conduct and reaffirm their understanding. Additional supplemental training is required to be completed every other year by our supervisors/managers and other employees depending on their role in the company.

See our Business Conduct Policy on our Investor page, under Corporate Governance tab, at www.jacobs.com for more information.

Training

Jacobs established a Global Ethics and Compliance training initiative program to further help employees understand the legal and ethical standards that must be upheld. Our organization-wide program is designed to provide a strong learning foundation and supplemental training, such as those conducted through regional training efforts, at our Annual Business Meeting, and through Jacobs College. Since 2005, Jacobs College has offered senior leader-led training with modules dedicated to ethics. Training is highly interactive, leveraging actual company scenarios.

Due to our many geographic locations around the world, the majority of our training

is delivered through online learning. The training is enhanced with in-person learning events.

The following concepts are woven throughout all online compliance courses:

- Observance of moral and ethical standards of society and fair dealing
- Reporting and resolving suspected irregularities
- Corporate governance
- Jacobs Integrity Hotline

Jacobs Integrity Hotline is a worldwide reporting line answered 24 hours a day, seven days a week by a professional independent contractor. Calls are confidential and can be anonymous.

We take ethics very seriously. Violation of company policies have severe consequences, including termination of employment.

All Jacobs employees and business partners are expected to be guided by the following principles as they carry out their responsibilities:

- Loyalty
- Compliance with applicable laws
- Observance of ethical standards
- Conflict of interest
- Communication

In addition to the Business Code of Conduct Reaffirmation, Jacobs offers additional ethics and compliance courses, including:

- Procurement Integrity
- Information Security
- Insider Trading
- Conflicts of Interest
- Global Bribery and
- Corruption Awareness

Jacobs and its affiliates and subsidiaries have always followed the highest principles of business conduct, integrity, and ethics. That is the reputation we now enjoy. We intend to keep it. Our corporate policy concerning business conduct, integrity, and ethics for the United States and internationally is available on our public web site: www.jacobs.com.

PUBLIC FILINGS

SEC Regulations

Jacobs is a publicly traded company on the New York Stock Exchange, (NYSE: JEC) and we are regulated by the U.S. Securities and Exchange Commission (SEC). For additional information about Jacobs, please see our *2013 Form 10-K* and other filings available on the Investor section of our public Web site www.jacobs.com.

ORGANIZATIONAL PROFILE

Significant Changes in Size, Structure, & Ownership

Significant acquisitions for the latter half of 2013 and early 2014:

- In October 2013 Jacobs' South African joint venture, Jacobs Matais (Proprietary) Limited, acquired the business and assets of Ilitha Projects and Ilitha Staffing, two South African professional services companies operating out of the city of Cape Town, SA. Ilitha Projects provides project management and EPCM services to clients in a broad range of market sectors, including oil and gas, refining, chemicals, power, nuclear, marine mining and metals. Ilitha Staffing supplies technical contract staff sourcing and management services with a strong emphasis on integration with the client's culture and business practices. The

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acquisition adds an engineering office in Cape Town and 161 professional services staff to Jacobs Matisis, bringing its personnel count to over 300.

- In early November 2013 acquired an interest in Guimar Engenharia, a privately held engineering services and project management/construction management (PMCM) company based in Rio de Janeiro, Brazil. The acquisition is a staged investment, with each stage subject to certain closing conditions. Guimar has a broad client base and operations throughout Brazil, where it is a leading provider of PMCM services for clients in the pulp and paper, petroleum, chemicals, food and beverage, mining and minerals, building and infrastructure industries. Guimar had a staff of about 1,100.
- In late November 2013 Jacobs acquired assets of MARMAC Field Services, Inc. (MARMAC) headquartered in Costa Mesa, Calif. The acquisition enhances Jacobs' capabilities in pipeline engineering and design services; both geographically and by adding additional capabilities to serve the utility and gas industries. For over 40 years, MARMAC has provided pipeline engineering services in the Western U.S.
- In December 2013 Jacobs completed its merger transaction with Sinclair Knight Merz (SKM), a 6,900-person professional services firm headquartered in Australia, in accord with the previously announced terms. Founded in 1964, SKM has broad consulting, planning, engineering, architecture, scientific and construction management capabilities with significant operations in Australia, Asia, South America, and the U.K. SKM serves clients in multiple industries, including mining and metals, building and infrastructure, water and environment, and power and energy.
- In January 2014 Jacobs acquired the assets of FMHC Corporation (FMHC) headquartered in Chicago, Ill. FMHC is a nationwide provider of turnkey wireless communications site development, design, network deployment, construction, and related services to clients operating in the wireless telecommunications industry.
- In February 2014 Jacob acquired Eagleton Engineering, LLC (Eagleton) headquartered in Houston, Texas. The acquisition enhances Jacobs' capabilities in midstream and upstream pipeline engineering, design, and field surveying services.
- In April 2014 Jacobs entered into an agreement to acquire Federal Network Systems (FNS), a subsidiary of Verizon Communications headquartered in Ashburn, Va. The closing of the transaction was subject to various conditions and was finalized in early summer of 2014. FNS provides systems integration and communication, information technology and data security solutions for the global market; with particular focus on supporting the intelligence community, the Department of Defense, and federal civilian customers. Its workforce of more than 750 employees designs, integrates, secures, operates and maintains highly complex mission critical voice, data, and video networks.

There have been no changes to our Board of Directors since publication of our 2013 Sustainability Report.

GOVERNANCE, COMMITMENTS, & ENGAGEMENTS

Membership in Associations & Advocacy Organizations

Jacobs is involved with, holds membership in, or has employees who hold membership in many associations and advocacy groups worldwide. These include the American Institute of Architects, the American Public Works Association, the International District Energy Association, the Society of American Military Engineers, the National Society of Professional Engineers, the Urban Land Institute, and more. The specific number/listing is too extensive for this report. We encourage employees to participate in organizations that provide continuing education, industry insight, the opportunity to participate in community, and more.

List of Stakeholder Groups Engaged by the Organization

At Jacobs we are committed to being open and transparent for our stakeholders. Our stakeholders are, inclusively, our clients, employees, shareholders, subcontractors, suppliers, business associates, the communities where we work and live, and society at large.

Stakeholder Engagement

We engage in open and transparent communication with our stakeholders in various ways at many levels every day. As required by the GRI guidelines, the following information details the ways in which we engage with specific stakeholder groups. The basic tenets of our core values — people, relationships, growth — provide the structure for all of our engagements.

Our Clients — We are a relationship-based company. Our Client Expectation and Client Satisfaction Surveys are a formal process that allow us to go beyond the traditional expectations of safety, cost, and schedule, to truly understand our clients' expectations. The survey process creates a unique venue and opportunity for our employees to align with clients on sustainability issues, and to determine a course of action. We measure ourselves against meeting client expectations and pinpoint where we can improve. Our resulting improvements are not just words, but suggestions put into action. Over the years our Client Satisfaction Survey scores have increased, and, as with 2013, we remain at more than 91 percent. We are proud of this accomplishment and driven to continue to improve these scores year after year.

Our Investors — We are committed to transparency, and communicate regularly with our shareholders and other contacts in the world financial arena. As a publicly traded company on the New York Stock Exchange, we are regulated by the U.S. Securities and Exchange Commission (SEC). More information on our responsibilities to our shareholders can be found on www.jacobs.com.

Our Employees — Due to the size and geographic diversity of our company, it is vital that we actively engage with our employees. We do this through a variety of methods, from face-to-face interaction, to a robust intranet site, to training programs and all-employee e-mails.

Examples of Specific Activities

Our People Metrics employee opinion survey, conducted bi-annually, gathers employees' perceptions about their work experience. In 2013, more than 34,000 employees participated in our People Metrics survey. We have found from our survey results that we have a highly engaged workforce and strong survey results as compared with other companies in the professional service area. Our next People Metrics survey is scheduled for 2015.

Our Annual Business Meeting brings together a mix of our top leaders at the beginning of each fiscal year. Fiscal results for the previous year and goals for the next 18 months are reviewed.

Creation of a CEO Annual Video, which is distributed throughout the company.

Jacobs' annual Inclusion Conference provides employees from around the world the opportunity to build multinational networks, develop leadership and technical skills, and enhance their careers at Jacobs. We also maintain an Inclusion Network on JacobsConnect, our internal Web site. The Jacobs Inclusion Network focuses on understanding the many facets of inclusion and the opportunities it presents to our business. We do more than respect and value diverse perspectives, we seek them out and embrace them, fostering a highly collaborative environment where people are empowered to contribute. They bring fresh approaches to solving problems and the innovation we need to prosper in a global market, benefiting all Jacobs stakeholders — be they employees, customers, or shareholders.

We have a Women's Development Network for female Jacobs employees to network, learn, and grow in their careers.

We also maintain a Women's Collaborative page on JacobsConnect, our internal Web site. This page includes an "employee Spotlight," a "Women on the Move" highlight feature, and other resources.

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Training: Average hours of training per employee = 18

Jacobs is investing in significant improvements to our Learning Management System (LMS) as a module within Oracle HR to improve tracking of employee training and to advance our offerings with online learning. In the meantime, through surveying of each operating unit we estimate that employees complete at least an average of 18 hours per year of formal training internal to Jacobs.

In addition to this formal training, we sponsor a number of conferences that are in large part designed as learning events with global teams established six weeks in advance of these events to work together in the development of sessions that are then offered to engage all participants. In FY13 those conferences included:

- Inclusion Conference, including 150 participants drawn from across Jacobs and representative of our global population
- Annual Business Meeting, including 379 participants drawn from across Jacobs and representative of the leadership within our global population

We also conducted a Jacobs Futures Weekend for the purpose of development and networking that included 193 participants with less than five years of experience in the work place.

We follow the laws, rules, and regulations of every place and country in which we work. Our core values reinforce our standards of ethical, humane treatment of all people. We take action every day to ensure a safe, inclusive, and engaging work environment for our employees, our clients, and our stakeholders. Therefore, we have developed programs and processes that help us track and improve our policies on diversity, safety, the environment, and human rights wherever we work around the globe.

Human Rights & Labor Laws

All employees are expected to comply with all laws, rules, and regulations of all U.S. and non-U.S. governmental entities, and other private and public regulatory agencies. Adhering to human rights and labor laws is of great importance to us and we expect the companies we associate with to do the same.

Human rights and labor are the most prominent prequalification criteria of our partner and subcontractor evaluation and selection process. We do not work with any company that does not respect the United Nations' Universal Declaration of Human Rights. All partners and subcontractors must also adhere to the international labor conditions defined by the International Labor Organization (ILO). We screen 100 percent of prospective partner and subcontractor companies before entering into any contract. This includes a review of ethics, human rights regulations, labor conditions, safety standards, quality measures, environmental policy, cost, and schedule. If a company does not qualify on any of these terms, our policy deems we do not work with that company.

Our prequalification process for vendors and suppliers is the same as the process for partners and subcontractors. For qualified suppliers with whom we enter into a signed contract, a monitoring system goes into effect.

Our employees are trained in all applicable laws, and our inspectors and project personnel serve as our "ears on the ground," to monitor all aspects of the vendor's initial qualification.

Hours of training on human rights in FY13 totaled more than = 3,000 hours and included close to 2,100 people.

- HIPPA at Jacobs – 327 people (1 hour course)
- Preventing Workplace Harassment (partial launch) – 619 people (1 hour non-California course)
- Creating an Inclusive Environment – 440 people (2 hour module of Management Leadership Course)
- Ethics – 321 leaders (2.5 hours Jacobs College)

Ethics from a Cultural Perspective– 379 people (1 hour presentation at FY13 Annual Business Meeting)

Diversity

As a global industry leader, Jacobs employs a dynamic mix of people to create the strongest company possible. Jacobs' policy forbids discrimination in employment on the basis of age, culture, disability, education, gender, region of national origin, sexual orientation, physical appearance, race, or religion. We are an inclusive and diverse company with people of all different backgrounds, experiences, cultures, styles, and talents. We enter into partnerships with various minority and women's professional groups, including the Society of Women Engineers, the National Society of Black Engineers, the Society of Hispanic Professional Engineers, and the National Action Council for Minorities in Engineering.

Diversity is a key factor in the way we interact with our vendors, and is a required element in our procurement decision matrix. Our Jacobs Global Supplier Database (JGSD) of suppliers and contractors serves as a repository for all data and provides the information to manage our ongoing relationship development with small and diverse companies.

Security

In mid FY13 we added a Director of Security as a new role within Jacobs.

The safety and security of our employees, partners and visitors is a part of our core values. In some countries in which we operate, this means accepting protection from host country military which may include the army, police, gendarmerie, or para-military. Jacobs provisions when working with police or armies requires for any security arrangements to be approved and accepted, they must foster human rights and be consistent with international standards of law enforcement. In engaging the military to provide protection, the following principles apply:

- We respect international laws and those of the host country, in spirit and letter.
- We ensure that all staff and contractors apply the highest moral and ethical standards, particularly to human rights as documented in the Voluntary Principles on Security and Human Rights and the OGP guide Firearms and the use of force. We endeavor to ensure that the security forces working with us are properly trained and operate within the framework of the principles.

Any report of a human rights and/or security violation will be promptly investigated. Our employee resources such as the Code of Conduct and Jacobs Integrity Hotline help ensure human rights issues are identified and addressed.

PEOPLE METRICS	2013	2011	2009	2007	2005	2003
Completed Surveys	34,655	28,672	29,786	24,360	13,752	14,067
Participant Rate	79%	73%	73%	74%	70%	71%
Average on Individual Items	80%	77%	78%	74%	66%	63%

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Anti-corruption, Ethics and Business Integrity

- Classroom Anti-Corruption Training – led by Compliance Officer or designee – 15 classes - 400 people (1 hour session)
- Business Code of Conduct with On-line Anti-Corruption Policy Training – FY13 28,144 completed (96% of those assigned)
- Global Anti-Corruption – new course roll out scheduled in FY14 for 4,000 people
- Business Integrity – led by Compliance Officer – 3 classes, 53 people (2 hour session)
- Jacobs College – Ethics – 2.5 hours – 321 leaders
- Annual Business Meeting – keynote speaker – Ethics from a Cultural Perspective – 1 hour – 430 senior leaders
- Jacobs Future Network Weekends – Project Ethics – 75 minutes – 193 early career professional employees

ECONOMIC

Economic Performance

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

Please see our Annual Report (Form 10-K) at www.jacobs.com.

Market Presence

Procedures for Local Hiring & Proportion of Senior Management Hired from the Local Community at Significant Locations of Operation

While laws on discrimination may vary from country to country, it is the policy of the Company that there shall be no discrimination in employment on the basis of age, culture, disability, education, gender, regional or national origin, sexual orientation, physical appearance, race, or religion in any of its offices worldwide. The Company is committed to ensuring fair employment, including equal treatment in hiring, promotion, training, compensation, termination, and disciplinary action. In compliance with U.S. law, the Company also maintains a formal affirmative action program for all of its U.S. operations. Jacobs does place a high value on global diversity and has created a global recruitment campaign to encourage such diversity.

With fair employment and compliance with country and local law in mind, it is common practice to give preference to candidates in close proximity to the job location, particularly when resources may not be allocated or available for relocating the candidate to the job location.

Indirect Economic Impacts

Development and Impact of Infrastructure Investments and Services Provided Primarily for Public Benefit Through Commercial, In-Kind, or Pro Bono Engagement.

Jacobs' infrastructure business includes: transportation and rail, aviation, water infrastructure, and telecommunications services delivered worldwide. We have full life-cycle capabilities, including planning, environmental, design, consulting, engineering, design-build, construction, and program management services.

TOTAL WORKFORCE BY EMPLOYMENT TYPE, CONTRACT, AND REGION

Total 67,498 including Contract/Agency provided labor and Craft as of May 30, 2014

CONTINENT	STAFF Incl. contract/agency	CRAFT/SKILLED Incl. contract/agency
North America	23,731	13,792
South America	1,138	N/A
Europe	11,568	831
Asia (includes Middle East)	9,182	N/A
Australia (includes New Zealand)	4,435	N/A
Africa	181	N/A
Antarctica	N/A	N/A
Totals	52,875	14,623

TOTAL WORKFORCE BY GENDER & AGE DISTRIBUTION

	DEMOGRAPHIC	WORKFORCE
Gender	Female	21%
	Male	79%
Age Groups	Younger than 30 years old	17%
	30-50 years old	34%
	Older than 50 years old	49%

SOCIAL PERFORMANCE

Labor Practices and Decent Work

Voluntary Turnover Rate for the 2013 Fiscal Year was about 10.76 percent globally.

Percentage of Employees Covered by Collective Bargaining Agreements

Approximately 14,623 employees - 22 percent - are covered by a collective bargaining agreement. This includes contract/agency craft personnel (294).

SOCIAL PERFORMANCE: PRODUCT RESPONSIBILITY

Product Responsibility, Programs for Adherence to Laws, Standards, & Voluntary Codes Related to Marketing Communications, Including Advertising, Promotion, & Sponsorship

Jacobs is an international provider of professional services. The core of our business model is our relationship-based philosophy. We do very limited advertising and promotion. When we do engage in marketing activities, we adhere to the strict standards in our Business Code of Conduct. It is Jacobs' policy that any marketing materials featuring our clients are fully reviewed and approved by the client. Usage rights of all materials are always verified and obtained.



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2014 SUSTAINABILITY REPORT

*Thank you for taking the time to read our
2014 Sustainability Report.*

To access the *2014 Sustainability Report*
on our Web site, visit
www.jacobs.com/sustainability.

For specifics on information included in the
2014 Sustainability Report, contact Jennifer
Malone at jennifer.malone@jacobs.com

Jacobs: We See Sustainability Differently

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