# 2012 CORPORATE SUSTAINABILITY REPORT

ADRIAN SMITH+GORDON GILL
ARCHITECTURE

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Adrian Smith + Gordon Gill Architecture
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#### ADRIAN SMITH+GORDON GILL

#### ARCHITECTURE

11 June 2013
2012 AS+GG CSR Report
Letter from the Partners

Welcome to our 2012 Corporate Sustainability Report (CSR). This is our third annual report and it demonstrates our continuous improvement with regards to sustainability in our operations and design activities.

We are pleased with our 2012 results and we have met most of our goals. I want to congratulate our entire team for their dedicated and very focused effort and commitment to achieving these goals.

That being said, we still believe that we need to push the boundaries in all of our activities. We need to reach for greater efficiency and set the standards as thought leaders. We need to do this EVERY DAY. For example, as energy efficiency becomes a main-stream focus we need to expand further into water efficiency and controlling waste in all of our activities.

The 2012 CSR also shows our commitment to the 'AIA 2030 Challenge' which pushes us to achieve the '2030 Commitment' sustainable goals. The AIA 2030 Challenge mandates that we track how our project design efforts compare to the architectural industry as a whole. We still have a significant effort to go to meet the 2030 Commitment, as does the entire architectural industry.

We need to create designs to influence and to LEAD our profession. We need to effect change.

We also need to make a concerted effort to educate our clients and to have them agree to share building data with us through the life of the building. From these results we can expand our database to allow us to compare performance and hopefully predict results with even greater accuracy. This will improve the efficiency of our design process.

We are committed to performative design as a firm-wide philosophy and we are adhereing to this philosophy and even expanding the meaning of performative design. Our goal is that each and every person who works either for us, or with us as consultants or as our clients, is committed to these ideals. We welcome any thoughts or comments that readers may have.

Robert Forest AIA, OAA, RIBA, LEED AP

Partner

# 2012 GOALS

# Energy 🔘

Continue tracking and report office wide energy consumption	
2% decrease in electricity consumption	$\checkmark$
Work with our building manager to identify potential building-wide energy saving strategies	discussions have started and we will continue to pursue
Discuss joining Retrofit Chicago with out building manager	$\checkmark$
Transportation 🚳	
Conduct a 2012 transport survey bi-annually	survey is conducted annually
Keep a log of all virtual meetings and flights taken by staff	
Recycling + Waste 🍘	
Increase office recycling rate to 60% by increasing staff awareness and implementing a new waste management policy	
Monitor waste generation and recycling rates throughout the year by conducting a monthly waste audit	waste audits conducted but not monthly
Increase employee use of sustainable materials and supplies through increased employee awareness of vendors and policies	

# Design: Energy 🕡

Prepare an energy model for all projects over 5,000 m<sup>2</sup>

50% of projects were modeled

Request a commitment from our clients to report the actual energy use of their projects to AS+GG in order to track actual energy use versus modeled energy demand



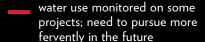
Target 25% energy savings for every project against an ASHRAE 90.1 baseline



#### Design: Water



Track all water use per project and educate clients on the benefits and strategies of efficient water use



Request a commitment from our clients to report the actual water use of their projects to AS+GG in order to track actual water use versus modeled water demand



#### Design: Waste + Materials



Incorporate construction waste reduction planning- through the WRAP Designing out Waste Tool into all future projects



addressed on projects but need to incorporate further

#### Design: Environment + Health



Research metrics used to estimate occupant health/ productivity/ satisfaction within the built environment and model these during design and occupancy phases



employees

30% of staff have a green building accreditation our staff have lived in

24

different countries

founded in

2006

24% average reduction from ASHRAE 90.1 for modeled design projects

# 12% decrease in carbon emissions since 2011



of staff use public transit, bike or walk to work



6% decrease in energy consumption since 2011

our staff lives an average of miles from our office



# WHO WE ARE

Adrian Smith + Gordon Gill Architecture was founded in 2006 by partners Adrian Smith, Gordon Gill and Robert Forest. Headquartered in Chicago, Illinois, the firm specializes in architecture, urban planning, interior design and sustainable design. We also have an office in Beijing. AS+GG's architects have expertise in a range of building types, including supertall towers, large-scale mixed-use complexes, corporate offices, exhibition facilities, cultural facilities and museums, civic and public spaces, hotels and residential complexes, institutional projects and high-tech laboratory facilities.

AS+GG uses an integrated, performative design approach that emphasizes a symbiotic relationship with the environment. We strive to seek out projects that are focused on sustainable issues that can become a part of a larger global effort of sustainability. We are not limited by new building projects; included in our sustainable approach are the retrofitting and rejuvenation of existing building projects both at a building and up through a city scale. We explore new methods to meet our goals and advance the practice of architecture and urban design.



## **LEADERSHIP**







Adrian Smith FAIA, RIBA, has been a practicing architect for over 40 years. His extraordinary body of work includes some of the world's most recognizable landmark structures. Adrian looks at each project holistically, considering site orientation, climate and geography, cultural and social influences to create highly sustainable projects that achieve contextualism within the global environment. As one of the world's foremost exponents of supertall towers, he has long worked to integrate energy-efficient systems into his designs.

Gordon Gill FAIA, has designed award-winning architecture across the globe. His work emphasizes a holistic approach to design that integrates all project disciplines. The results are performance-based designs that work symbiotically with their natural surroundings, contributing to the sustainability of cities and creating an optimal user experience. These projects exemplify Gordon's philosophy that architecture must strike a balance with its global environmental context.

Robert Forest AIA, OAA, RIBA, LEED AP, has extensive knowledge and experience with the execution of projects on an international scale. His expertise in project management and technical architecture contribute to his comprehensive understanding of the practice of architecture. A recognized authority on the economics of sustainable design, he has combined his knowledge of local and international policies, funding sources and varied economic models to develop a system of best practices for managing high-performance projects.



Kathy Fanning CFO/COO



Brian Jack Director



Jorge Soler Director of Technical Design



Peter Weismantle
Director of Supertall Building Technology



Jon Orlove Director of Project Management



Sae Oh Director



Alejandro Stochetti Director of Design



Juan Betancur Director of Design



Peter Kindel
Director of Urban Design



Dr. Christopher Drew Director of Sustainability



John Burcher Director of Interior Design



WeiWei Luo Director of Chinese Operations

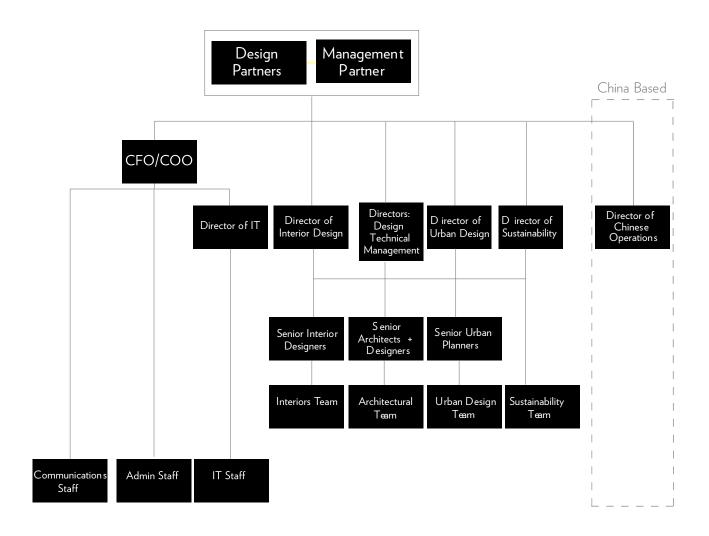


Ben Johnson Director



Dean Mueller Director of Information Technology

# OFFICE ORGANIZATION





We value the fact that our staff comes from a diverse mix of geographic origins and cultural backgrounds. In total, our staff members were born in, have lived in or are nationals of 24 different countries. This allows us to bring a global perspective to our projects and this knowledge of cultural, religious, aesthetic, socioeconomic and technical differences enables us to thrive in both a local U.S. or international setting. The map above illustrates the places our staff are from with countries weighted based on percent of staff.

# **SERVICES**

#### AS+GG SERVICES:

#### **ARCHITECTURE**

Civic Institutional
Commercial Mixed Use

Cultural Residential

Hospitality Supertall

#### **URBAN DESIGN**

City Planning

Infrastructure Design

Landscape Design

#### **INTERIOR DESIGN**

Interior Design

Furniture Design

Product design

**SUSTAINABILITY** 











AS+GG focuses on the design of highperformance, energy-efficient and sustainable architecture on an international scale. The practice includes designers with extensive experience in multiple disciplines, including technical architecture, interior design, urban planning and sustainable design.

Our architects also have expertise in a range of building types, including supertall towers, large-scale mixed-use complexes, corporate offices, exhibition facilities, cultural facilities and museums, civic and public spaces, hotels and residential complexes, institutional projects and high-tech laboratory facilities.

The firm has earned a strong international reputation through working with clients all over the world. Our staff's diverse knowledge of design, cultures, and techniques allows us to create novel designs around the globe.

We seek out ways to expand our perspective and generate new discoveries and insights into the world of design.

The above map depicts the international experience of our office.

# THE ENVIRONMENT

We recognize that business activities place a certain strain on the environment. As a global design firm we need to address our environmental impact. While we are in no way perfect, we have been implementing and maintaining sustainability initiatives over the past 3 years in an effort to reduce our environmental impact. We have instituted business practice standards to help reduce our consumption and waste production; we look for ways to incorporate the concept of sustainability at all levels of our operations.

Our unique position as a design firm also allows us to tackle problems such as global warming, environmental degradation, urbanization, air quality and pollution through the design of buildings and communities for our clients. Part II: The Environment is divided into two sections, Sustainable Business Practice and Sustainable Design Practice. We strive to apply the concept of sustainability to the work we do for our clients as well as our own business practices, to positively impact the world in which we live and work. In the following section, our business practices as well as our design practices are outlined.



### **ENERGY**

indirect energy consumption

2012 total indirect energy consumption: 2,554,094 kWh/ 9,194,738 megajoules

2011 total indirect energy consumption:

2,717,044 kWh

6% decrease

AS+GG does not directly purchase energy. All energy is purchased as an intermediate form for our office operations (i.e. heat, electricity and cooling). The chart to the right breaks down our 2012 energy consumption. This data was derived from our metered electricity bills and an estimate from our building owners for heat and cooling consumption was used.

In 2012, our targeted goal was a decrease in electricity consumption by 2%, which we met and exceeded by 4%. We target our electricity number because we have the most control over it and it is metered directly. Our heating and cooling costs are extrapolated from our total building consumption based upon our square footage. We will continue to work with our building managers to come up with solutions to help decrease total building energy consumption usage.

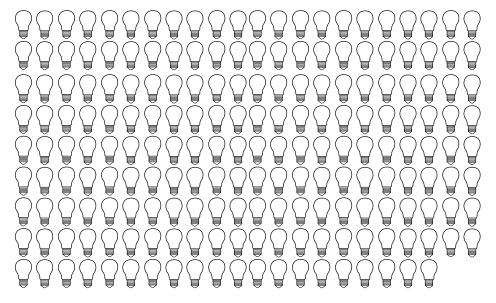


#### **ENERGY REDUCTION INITIATIVES**



In 2012 we utilized several initiatives to reduce our energy consumption:

- Computer monitor shut off policy
- Cloud computing
- Light occupancy sensors
- Adjustable shading window devices



This year we decreased our energy consumption by 6% which is equivalent to keeping 197 light bulbs constantly on for a full year.

**2013 Goal:** Reduce our electricity consumption by **2%** 

### **TRANSPORTATION**

#### HOW WE GET TO WORK





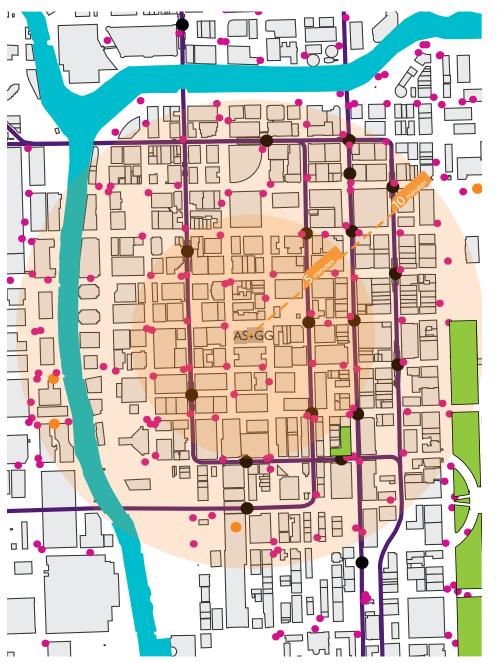








The data to the left illustrates AS+GG's staff's main mode of transport to work. This data was taken from a transportation survey of our employees for 2012 which had an 80% response rate. We encourage our staff to take public transport through subsidized Metra and CTA fares. Our office is also ideally located (shown on the map on the opposite page) in the Chicago Loop. In the future we hope to do a transport survey biannually in order to account for any seasonal variation.



The map to the left depicts AS+GG's location and access to public transport. Within a ten minute walk of our office there is easy access to bus stops, all local elevated train lines and regional Metra trains. The accessibility of transit to and from our office accounts for the low number of individuals who drive to work.

- el lines
- el stop
- bus stop
- Metra station

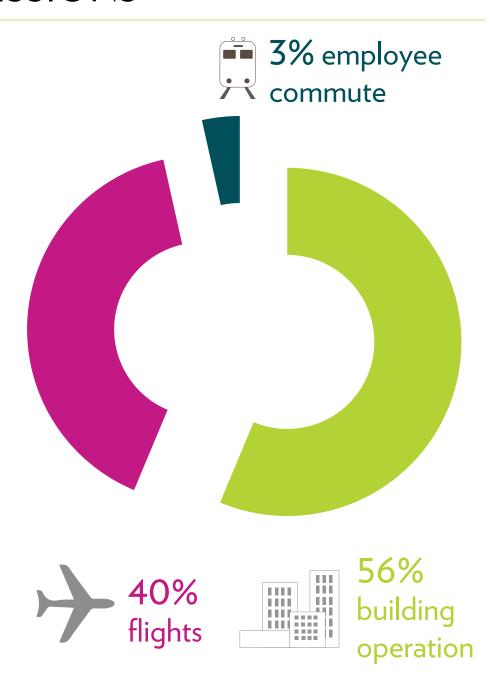
# **CARBON EMISSIONS**

2012 total carbon emissions: 1,368 metric tons  $CO_2$ 2011 total carbon emissions: 1,551 metric tons  $CO_2$ 12% decrease

AS+GG's carbon emissions are comprised of our building operating emissions, flights taken by staff, and our employee's commute to work. Building emissions are calculated based upon our electricity, heating, and cooling consumption. Annual electricity data is taken from our utility bills and an emissions factor of 0.641 kg CO2/kWh was used.

Our heating and cooling consumption was prorated based upon total building consumption and our square footage. Emissions factors of 5.506 kg CO2/ therm and 0.641 kg CO2/kWh for heating and cooling respectively. Flight data was taken from our travel agent for all AS+GG related flights taken by staff in 2012. From this data we were able to calculate the total miles traveled and the respective carbon emissions associated. Although flight emissions are not required to be reported, we feel that we should report them annually since they comprise such a significant amount of our total emissions.

Our employee commute emissions are taken from our annual transportation survey. From this we calculated each individual's commute emissions for the year. We used the average yearly emissions to extrapolate for those employees that did not complete the survey.



#### **2013** CARBON REDUCTION INITIATIVES



#### **Building Emissions**

- Continue to track and report energy consumption
- Decrease electricity consumption by 2%
- Use cloud computing for energy intensive tasks
- Utilize blinds and internal self shading devices in the summer to decrease cooling costs
- Educate staff on energy saving policies such as our monitor shut off policy
- Work with building managers to identify whole building energy savings



#### Flight Emissions

- Utilize Goto meetings whenever possible to decrease the amount of flights taken
- Arrange trips so that multiple meetings can take place to reduce multiple flights abroad



#### Transit Emissions

- Continue to offer subsidized public transit fares
- Continue to keep our office in a location that is easily accessible to public transit

# SUSTAINABLE DESIGN

We focus on eight themes of sustainable design: energy, water, waste, materials, environment and ecology, health and wellbeing, community and economics. Each project is specific and each strategy is tailored to the project. We also consider our designs to meet the following organizational guidelines: LEED, BREEAM, ESTIDAMA, 2030 Challenge and the Malaysian GBI when appropriate.



### **DESIGN ENERGY**

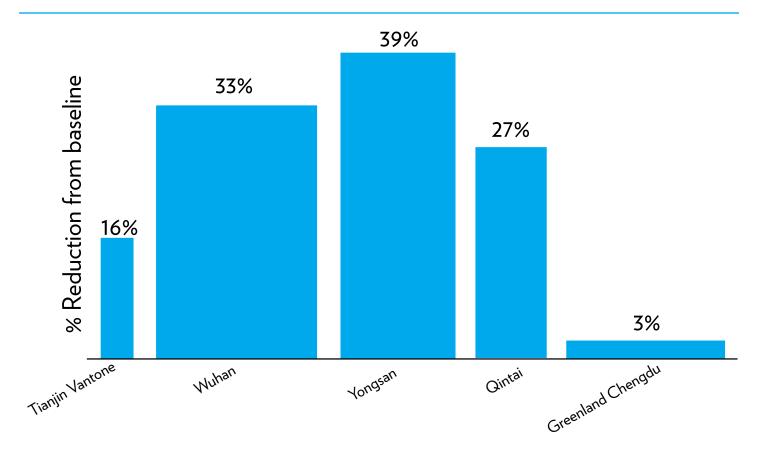
2012 Goal: 25% reduction from ASHRAE 90.1 2012 project performance: 24% reduction from baseline

AS+GG was formed based upon the ideals of sustainable design and part of that is the energy consumption of our buildings. Buildings account for over 40 percent of the energy sector's consumption, and it is up to the building sector to find a solution to decrease this. As designers, we have control over the buildings we design and the energy they consume. Each project is addressed individually and has its own set of limitations and obstacles to achieving high energy performance. In realizing this, we have established a target of 25% reduction in energy consumption from ASHRAE 90.1 for all of our projects. We have also signed onto the AlA's 2030 Commitment which has a goal of net zero carbon emissions by 2030.

We believe robust and transparent energy consumption data is important for ensuring long-term energy improvements. Being accountable, to ourselves, our clients and the public, is important for ensuring the success of our design. We have a commitment to the AIA to disclose our project's energy consumption annually and we have also chosen to do so in our CSR. This annual report helps remind us where we are each year and how we need to improve. It affords us the opportunity to be honest with ourselves for what we have achieved and evaluate how we can reach our goals.

In 2012, our average project energy reduction was 24%. This came very close to meeting our goal of 25%, but moving forward we would like to see this goal met on every project, not just as an average of projects. We realize that many projects face obstacles to meeting these targets but it is up to us to find innovative ways to work around these issues. For this reason, we believe an energy model should be done for every project over 5000 m2.

In 2013, we are aiming to meet a reduction of 30% from ASHRAE 90.1 for all projects. We have made several public commitments to energy reduction initiatives including but not limited to the AIA 2030 Commitment and the 2030 Challenge.



The graph above illustrates our 2012 projects that were modeled and their performance against baseline energy code. In 2013 we hope to have all new projects over 5000 sm modeled. This is necessary in driving our designs to perform better.

# OUR TEAM + COMMUNITY

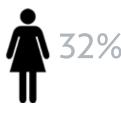
We foster a challenging and rewarding workspace and understand that the encouragement and development of each member of our staff will advance our practice of architecture. The business standards and practices outlined in the following section are implemented in hopes of bettering our staff as well as our organization.



## **WORKFORCE**

The successful business operation of AS+GG is built upon ideals of fair dealing and ethical conduct of our entire organization. We hold regard for the highest standards of conduct and professional and personal integrity. All AS+GG employees must follow the company's Code of Ethics and Conduct governing:

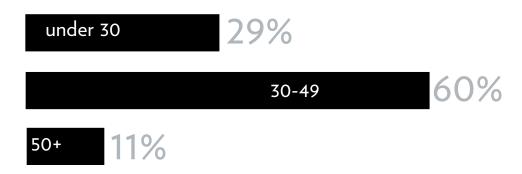
- Equal opportunity employment
- Solicitation of fellow employees
- Outside employment
- Confidentiality
- Sexual and other forms of harassment
- Conflicts of interest
- Acceptance of gifts
- Violence in the workplace
- Drug and alcohol use
- Problem resolution





# total employees: 87

Ethnicity	Female	Male	Percentage
African-American	0	0	0%
Asian	7	12	22%
Hispanic	2	8	11%
2 or more	0	2	2%
White	19	37	64%
Total	28	59	100%



# total new hires: 15 people or 17%

new hire breakdown	people	%
female	6	7%
male	9	10%
under 30	12	14%
30-49	3	3%
50+	0	0%
total	15	17%

# **BENEFITS**

AS+GG benchmarks its benefits against other similar firms. The following are offered to full-time employees:

- 401(k) savings plan
- Subsidized healthcare programs including medical and dental insurance
- Life and disability insurance
- Transportation benefits, which allows employees to set aside pre-tax earnings for mass transit and parking expenses
- Paid Time Off (PTO)
- Holidays
- Wellness programs
- Life and disability insurance
- Flexible Spending Account (FSA) and dependent Care Spending Account
- Subsidized training and self improvement courses
- Subsidized annual architectural membership



#### PERFORMANCE REVIEWS

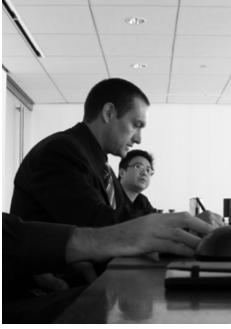
AS+GG's performance appraisal system is designed to communicate performance standards and to evaluate performance results. We strive to enhance employee development and work performance. We look to set goals and objectives that allow employees to maintain their career path. All employees that have worked with AS+GG for 6 months or more receive an annual performance review.

# TRAINING + EDUCATION









Education is a crucial part to our firm, as we think of our office as a constantly growing and innovative environment. We utilize both formal and informal training in order to advance that aspiration. We hold Performance Driven Design Forums monthly which allow for teams to share their experience and tools for solving design issues on projects. Experienced staff are encouraged to mentor junior staff and are seen as an educational resource.

Staff are also encouraged to seek outside formal training in order to advance their skills and , depending on the training, are compensated for it. Training sessions and courses sessions are sometimes offered within our office, but also staff attend courses outside the office. Lunch and Learn presentations are held regularly at our office as well.

30% of our staff have a green building accreditation

# **HONORS + AWARDS**

#### AS+GG recieved the following awards in 2012:

AIA Design Excellence, SustainABILITY Award, Chicago Central Area DeCarbonization Plan

American Architecture Award, King Abdullah Petroleum Studies and Research Center

International Architecture Award, Burj Khalifa Gatehouses

International Architecture Award, Solar EV Dock

Green Visionary Award Chicago ACE Mentor Program

# CHARITABLE CONTRIBUTIONS

ACE Mentor Program of Illinois Lookingglass Theatre

AIA Chicago Museum of Contemporary Arts

Chicago Architecture Foundation Northwestern University Library

City of Hope Respiratory Health Association

Friends of Downtown Steppenwolf Theatre Company

Friends of Gorton The School of the Art Institute of Chicago

JP Morgan Chase Corporate Challenge Unity Temple

# COMMUNITY ENGAGEMENT

United Nations Global Compact

School of the Art Institute of Chicago

American Institute of Architects

**BREEAM** 

Project Management Institute

Chicago Women in Architecture

Architects Registration Board

**Urban Land Institute** 

Northwestern University Deering McCormick Library

Korean Construction Engineering Association

**NCARB** 

Hong Kong Green Building Council

Chartered Institute of Waste management

International Interior Design Association

Royal Institute of the Architects of Ireland

**USGBC** 

Chicago Architecture Foundation

American Society for the Advancement of Project Management

**AICPA** 

Royal Institute of British Architects

Society of Building Science Educators

Lookingglass Theater

**ACE Mentor Program** 

Network of the Hospitality Industry

Korean Institute of Architects

Chicago Committee on High Rise Buildings

American Society of Interior Designers

# **2013 GOALS**

# Energy 🔘

Continue	tracking	and re	eport	office	wide	energy	consum	otion

2% decrease in electricity consumption

Work with our building manager to identify potential building-wide energy saving strategies

#### Transportation



Conduct a 2013 transport survey bi-annually

Keep a log of all virtual meetings and flights taken by staff

# Recycling + Waste



Increase office recycling rate to 65% by increasing staff awareness and implementing a new waste management policy

Monitor waste generation and recycling rates throughout the year by conducting a monthly waste audit

Increase employee use of sustainable materials and supplies through increased employee awareness of vendors and policies

# Design: Energy 🕡

Prepare an energy model for all projects over 5,000 m<sup>2</sup>

Request a commitment from our clients to report the actual energy use of their projects to AS+GG in order to track actual energy use versus modeled energy demand

Target 30% energy savings for every project against an ASHRAE 90.1 baseline

#### Design: Water



Track all water use per project and educate clients on the benefits and strategies of efficient water use

Request a commitment from our clients to report the actual water use of their projects to AS+GG in order to track actual water use versus modeled water demand

#### Design: Waste + Materials



Incorporate construction waste reduction planning- through the WRAP Designing out Waste Tool into all future projects

#### Design: Environment + Health



Implement metrics used to estimate occupant health/ productivity/ satisfaction within the built environment and model these during design and occupancy phases

#### **GRI Table**

AS+GG believes consistent CSR reporting measures are valuable for business worldwide, and we have adopted the Global Reporting Initiative (GRI) methodology.

Some of the standards and indicators of the GRI are not applicable because of the nature of our organization. Wherever the GRI is applicable we have included information to the best of our ability.

Following is a table summarizing the contents of this report and the corresponding guidelines from the Global Reporting Initiative, Sustainability Reporting Guidelines, version 3.0 (G3).

Pages: 3,4,5
Pages: 8,10,11,12,13,14,15,34
Pages: Cover,3,39
Pages: 10-12
Pages: 30-32
Pages: 16-23
Pages: 12-13,32-36

For more information on the Global Reporting Initiative, visit: www.globalreporting.org



# FEEDBACK

It is intended that a detailed Corporate Sustainability Report will be issued every year from AS+GG. This report was created in order to establish transparency regarding our economic, environmental and social impacts and procedures.

AS+GG welcomes feedback regarding the information in this report. If you wish to provide feedback, please contact Christopher Drew, PhD., Director of Sustainability, at chrisdrew@smithgill.com.



This is our Communication on Progress in implementing the principles of the United Nations Global Compact.

We welcome feedback on its contents.