# UN GLOBAL COMPACT INITIATIVE COMMUNICATION ON PROGRESS 2018

ADRIAN SMITH+GORDON GILL
ARCHITECTURE

#### Dear Stakeholders,

Adrian Smith + Gordon Gill Architecture became a signatory to the United Nations (UN) Global Compact in September 2012. In doing so, we made a commitment to supporting and implementing the ten principles of the United Nations in the four areas of Human Rights, Labour, Environment and Anti-Corruption. We will continue to support these principles over the coming years and report annually on our progress. Furthermore, we are committed to supporting the 17 Sustainable Development Goals (SDGs) in both the way we operate as a business and through the way that we approach and execute our design work.

As part of this commitment, we are required to make an annual disclosure whereby we inform our stakeholders about our efforts to implement the principles of the UN Global Compact. The disclosure report, termed a Communication On Progress (COP), is comprised of two main parts. The first relates to the 10 UN Global Compact Principles and is a description of how we have maintained compliance with the principles. The second section is a summary of our approach to the SDGs that we believe we have an influence on either through our day-to-day business operations or through the products of our work. We disclose statistics about our team – ethnicity, gender pay equity etc. and statistics about our work – how we have reduced carbon emissions of our buildings, how we approach water use reduction etc.

We present this Communication On Progress report to you for your feedback and look forward to continuing to improve our work practices and our effect on the built environment.

Yours sincerely

Robert Forest

FAIA, OAA, RIBA, LEED

Partner





### ADRIAN SMITH+GORDON GILL

### ARCHITECTURE

Adrian Smith + Gordon Gill Architecture (AS+GG) is dedicated to the design of high-performance, energy-efficient, and sustainable architecture on an international scale.

We approach each project, regardless of size or scale, with an understanding that architecture has a unique power to influence civic life. We strive to create designs that aid society, advance modern technology, sustain the environment, and inspire those around us to improve our world.

Our office is dedicated to the creation of new paradigms for sustainable development. We utilize a holistic, integrated design approach that emphasizes symbiotic relationships with the natural environment—a philosophy we have termed "global environmental contextualism."

This approach, which takes into consideration building orientation, daylighting, generation of wind power, solar absorption, and a site's geothermal properties, represents a fundamental change in the design process in which "form follows performance".

It is predicated on the understanding that everything within the built and natural environment is connected and that a building's design should stem from an understanding of its role within that context—locally, regionally, and globally.

Such a pluralistic approach acknowledges the interaction among building systems as well as between those systems and the natural environment and seeks to improve each individual system's performance. By using this principle in the design of buildings, we can create structures that significantly reduce, or eliminate, their environmental impact.

AS+GG's practice includes designers with extensive experience in multiple disciplines including technical architecture, interior design, urban planning, and sustainable design. 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 was founded in 2006 by partners Adrian Smith, Gordon Gill, and Robert Forest and has 80 employees in offices in Chicago and Beijing. For more information, please visit smithgill.com.



## OUR APPROACH TO THE 10 PRINCIPLES

Our approach to addressing the ten principles happens at three levels. what we do ourselves; what we require our consultants and sub-consultants to do; and, what we require our materials suppliers to commit to through specifications. These are summarized in the table below and described in more detail in the subsequent sections.

	HUMAN RIGHTS	LABOR	ENVIRONMENTAL	ANTI- CORRUPTION
AS+GG	OFFICE POLICY	OFFICE POLICY	OFFICE POLICY DESIGN APPROACH	OFFICE POLICY
CONSULTANT AND SUB- CONSULTANT	CONSULTANT AGREEMENT	CONSULTANT AGREEMENT	DESIGN AND CONSTRUCTION TARGETS	CONSULTANT AGREEMENT
SUPPLY CHAIN	CODE OF CONDUCT AS PART OF SPECIFICATIONS AND MATERIALS SUBMITTAL	CODE OF CONDUCT AS PART OF SPECIFICATIONS AND MATERIALS SUBMITTAL	PROJECT SPECIFIC TARGETS FOR ENVIRONMENTAL PERFORMANCE. ISO 14001 CERTIFICATION	CODE OF CONDUCT AS PART OF SPECIFICATIONS AND MATERIALS SUBMITTAL





## **HUMAN RIGHTS PRINCIPLES**

Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and

Principle 2: Make sure that they are not complicit in human rights abuses.

### Assessment, Policy and Goals

AS+GG supports the Universal Declaration of Human Rights and has implemented policies which support the protection of such rights and avoidance of human rights abuses both within the firm and where they may inter-relate with our business activities.

The AS+GG Employee Handbook includes policies and position statements on business ethics and code of conduct as well as the company policy on equal employment opportunity.

### **Implementation**

The above documents, are discussed during new employee orientation and are readily available on the company intranet site, include specifically:

Section 1 - General employment Business ethics and conduct Equal employment opportunity

Section 6 - Employee standards of conduct Sexual and other unlawful harassment Violence in the workplace Disability accommodation

All employees of AS+GG are expected to adhere to these policies. In addition:

- Each year there is a mandatory attendance presentation by the HR department to all staff, supported by outside consultants, where the code of conduct is reviewed and any questions addressed.
- Each year, during the annual employee selfappraisal there is a specific reminder of where the Employee handbook is located and a confirmation requested that it has been reviewed.

Where AS+GG has direct dealings with external companies, the consultant agreement that they sign with us binds them to a master agreement that we sign with all of our clients. This agreement includes the American Institute of Architects (AIA) 2012 Code of Ethics and Professional Misconduct. The AIA code includes a rule related to Human Rights (rule 1.401).

Where AS+GG has indirect dealings with external companies - specifically contractors, manufacturers/ suppliers of products that we specify for use in the buildings that we design, we will develop a code of ethics that will be included as part of our agreement and our product specifications.

#### Measurement

In the past year AS+GG has not been the subject of any investigations, legal claims or other action relating to human rights.

















## LABOUR PRINCIPLES

Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;

Principle 4: The elimination of all forms of forced and compulsory labor;

Principle 5: The effective abolition of child labor; and

Principle 6: The elimination of discrimination in respect of employment and occupation.

### Assessment, Policy and Goals

AS+GG supports the International Labor Organization (ILO) core conventions.

AS+GG acknowledges every employee's right to be a member of a trade union and for collective bargaining and employee representation purposes.

AS+GG has issued policies to all employees and other staff regarding the importance of upholding equal opportunities and the prohibition of discrimination and harassment in the workplace on grounds of gender, race, disability, age, sexual orientation and religion.

Where AS+GG has direct dealings with external companies, the consultant agreement that they sign with us binds them to a master agreement that we sign with all of our clients. This agreement includes the American Institute of Architects (AIA) 2012 Code of Ethics and Professional Misconduct. The AIA code includes a rule related to Human Rights (rule 1.401) which covers discrimination.

All AS+GG specified suppliers will be expected to comply with the AS+GG code of ethics, which is under preparation. This guide expects that our suppliers do not use child labor or forced labor, are committed to equal opportunities and ensure that employees have the right to freedom of association and collective bargaining.

### **Implementation**

All employees of AS+GG are expected to adhere to anti-discrimination and equal opportunities policies

and confirm annually that they are aware of and adhere to these policies. In addition, an employee training program regarding equal opportunities has been implemented and the code of conduct, described for the Human Rights Principles above is applicable in terms of elimination of discrimination.

Additionally AS+GG is committed to pro-actively seeking opportunities to work with Minority and Women owned business Enterprises and we will begin reporting this as part of our annual Corporate Sustainability Reporting procedure.

AS+GG has a balanced workforce of male and female staff but senior leadership remains male dominated, as it does throughout most architecture practices, and we are actively trying to address this situation while at the same time demonstrating leadership and providing advocacy for females in senior positions.

As part of our design process we include Key Performance Indicators (KPIs). In our design for communities we have introduced a KPI that requires design for equal opportunities including specific strategies to support it.

### Measurement

In the past year AS+GG has not been the subject of any investigations, legal claims or other action relating to discrimination.



## ENVIRONMENTAL PRINCIPLES

Principle 7: Businesses should support a precautionary approach to environmental challenges;

Principle 8: Undertake initiatives to promote greater environmental responsibility; and

Principle 9: Encourage the development and diffusion of environmentally friendly technologies.

### Assessment, Policy and Goals

AS+GG is committed to on-going reductions in energy and resource consumption in both the buildings that we design and the way we operate.

From a design perspective we are globally recognized for our leadership in high performance buildings. We have developed a robust process to sustainable design working from a vision, through goals and targets and in to strategies and key performance indicators. We adopt this approach on all projects, regardless of whether the project is attempting to seek some form of green building certification or not. Our policy is to always design to exceed prevailing codes and, accepting that our buildings have to be resilient to the potential effects of climate change, we simulate performance against current and predicted weather patterns.

All AS+GG sub-consultants are expected to work towards the goals and targets set forth at the commencement of the project and through a rigorous design review process we are able to ensure that the buildings are designed such that the goals are met.

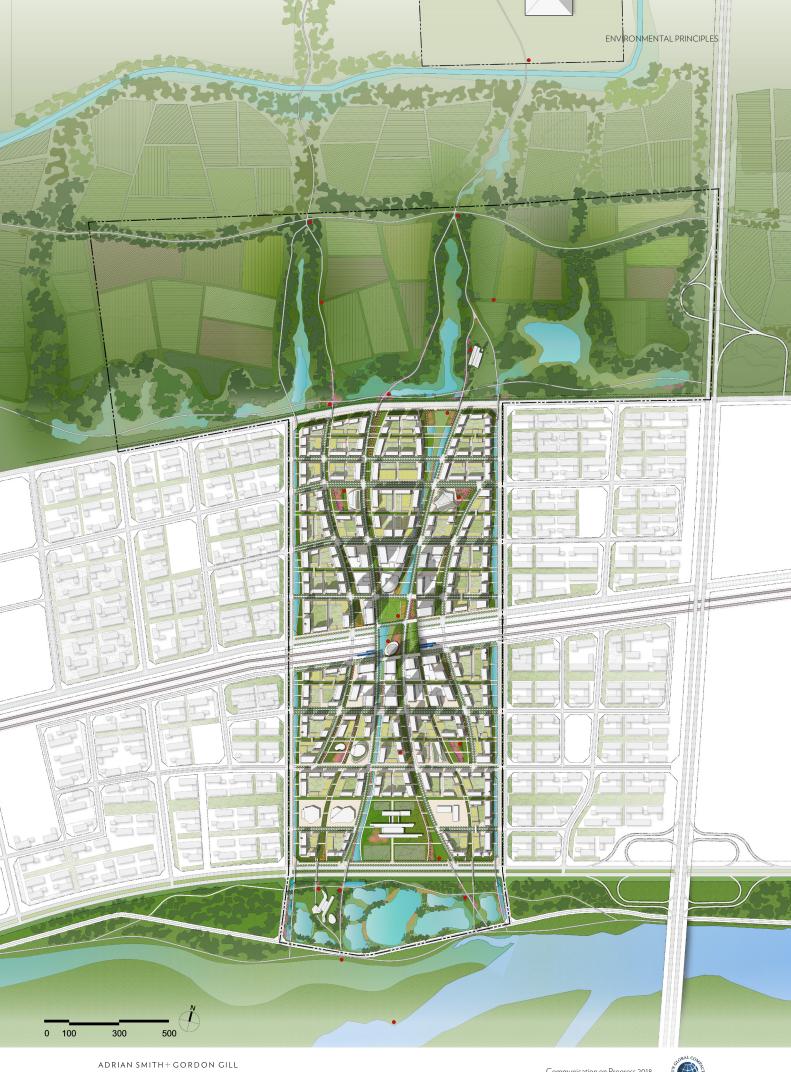
Within the building occupied by our firm AS+GG has an environmental policy that allows us to meet the reporting requirements for the Green Office Challenge. We also publish an annual Corporate Sustainability Report (CSR), in which we report on

energy and resource use within the office and set targets for the upcoming year.

### **Implementation**

AS+GG is a signatory to the Architecture 2030 challenge, and project energy reduction and renewable energy generation targets are established based on meeting their goals at the outset. We are also corporate sponsors of the Carbon Leadership Forum, where we contribute to promoting the development of Environmental Product Declarations. We have taken a leadership position by including the requirement for suppliers to provide such declarations when we specify certain materials - notably insulation, concrete, steel and some furnishing materials. We undertake whole of building life cycle analysis (operational and embodied emissions and environmental impacts) and have established a baseline against which we can develop improvement targets. We develop and use advanced building performance simulation software throughout the design process. AS+GG has recently reviewed most of our specifications to include stringent requirements relating to life cycle assessment and use of products containing PVC.

We have bi-weekly performative design lunch and learns in the office where staff present their projects and the lessons learned and technologies developed and / or implemented are shared throughout the firm.











## ENVIRONMENTAL PRINCIPLES (CONTINUED)

We encourage vendors and manufacturers to host lunch and learns in the office and typically we have one or two each week, to which all staff are invited and encouraged to attend.

Within the office, we have replaced most of the lighting with LEDs, the remainder being CFL. We provide recycling bins throughout the office and work with the janitorial staff and building management to measure segregation performance so that we may report it within the CSR.

We have funded additional staff training in passive house design and CEEQUAL assessment for infrastructure, public realm and landscape.

### Measurement

Environmental targets for our work are continually assessed throughout the design period. We work in an integrated manner with our sub-consultants and therefore as we improve the performance of the building envelope, or integrate low water consuming fittings, the engineers are able to incorporate these savings into their design. We report project performance annually to the American Institute of Architects and in our CSR. Some buildings will undergo formal Green Building Certification and the predicted energy savings as well as other environmental performance information is reported as part of the certification submittal.

Internally we report our own office's environmental performance through the CSR and through the Green Office Initiative.



## **ANTI-CORRUPTION PRINCIPLES**

Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.

### Assessment, Policy and Goals

AS+GG recognizes that bribery and corruption can be an issue in the construction industry and a concern in some of the places where we do business. AS+GG supports the UN Convention against Corruption and has issued policies and procedures regarding standards expected of employees in terms of acceptance of gifts and hospitality from third parties. Many of our clients contracts have anti-corruption clauses which AS+GG and our consultants are required to comply with.

Misconduct. The AIA code includes rule related to offering gifts (rule 2.102) and acceptance of gifts (rule 2.103)

#### Measurement

In the past year AS+GG has not been the subject of any investigations, legal claims or other action relating to the matters covered by these principles.

### **Implementation**

The AS+GG Employee Handbook includes the following policies related to bribery and corruption.

Section 1 - General employment

Business ethics and conduct

Section 6 - Employee standards of conduct

Conflicts of interest

Acceptance of gifts

All employees of AS+GG are expected to adhere to these policies. In addition where AS+GG has direct dealings with external companies, the consultant agreement that they sign (with us) binds them to a master agreement that we sign with all of our clients. This agreement includes the American Institute of Architects (AIA) 2012 Code of Ethics and Professional



On behalf of your colleagues, we welcome you to during the harden of as AS+GG) and wish you to Adrian Smith + Gordon Gill Architecture, LLP This handbook is a Deveral overview of policies or benefits. MISSION STATEMENT trian Smith + Gordon Gill Archi ure is dedicated to the following principles

world of design. Business Ethics and Conduct

The successful business conduct and conduct of our operation and reputation of AS+GG is built upon ideals of fair dealing is critical to the continued success. The successful business operation and reputation of AS+GG is built upon ideals of fair dealing or our integrity, which requires all of us to be in complete Ine successful dustriess operation and reperturbation of the organization. Our entire organization. We after organization. Our reputation is critical to the continued success and regulations, as well as a scrupulous. of the office of the organization. We are known for our integrity, which requires all of us to be in complete spirity. We also of conduct and professional and personal integrity. A STATE OF THE STA observance of the spirit and letter of all applicable laws and regulations, as well as personal integrity. The continued success of AS+GG is dependent upon our customers' trust. Employees owe a way that will preserve this trust. We must also realize The continued success of AS+GG is dependent upon our customers' trust. Employees owe a deteriorate this relationship. duty to AS+GG and our clients to act in a way that will preserve this trust. We must also realize this relationship. Ast Sc Will comply with all applicable laws and regulations and expects its directors, officers, and intent of all relevant laws AS, GG will comply with all applicable laws and regulations and expects its directors, officers, and intent of all relevant laws employees to conduct business in accordance with the letter, so unethical conduct. infetential 

## SUSTAINABLE GALS DEVELOPMENT GALS





## STRONG ENGAGEMENT ON THE SUSTAINABLE DEVELOPMENT GOALS

The United Nations Sustainable Development Goals (SDGs) are a series of 17 goals with 169 associated targets and 232 indicators. The goals were adopted in 2015 by all 193 Nations of the United Nations Generally Assembly with the intention that they be achieved by 2030.

Of the 17 Goals, we believe that 12 directly apply to us, either through the way we work, or through the work that we do.

The three partners of Adrian Smith + Gordon Gill Architecture established the firm in the belief that architecture had the power to solve many of the world's problems relating to the built environment and its impact on the planet and the human population.

Through making a conscious effort to analyze each goal, we have identified areas where we may contribute that we would have otherwise thought to be beyond our area of influence. It is our intention to produce a 2025 plan that will establish firm-wide targets to be achieved during the next 6 years.





## GOOD HEALTH AND WELL-BEING

- 3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents.
  - Creation of pedestrian oriented masterplans that separate foot traffic from high speed moving vehicles.
  - Creation of secure bike lanes that provide protection to cyclists from cars.
- 3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.
  - Draft and implement specifications that prohibit the use of materials containing VOCs in buildings that we design.
- 3.A Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate.
  - Promotion of green building certification that bans smoking in buildings.
- 3.D Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks.
  - Our office actively promotes staff participation in activities that promote wellness. This includes gym membership and entry fees for running events.
  - We promote the design of buildings that create a healthy working environment and one that encourages an active life style through walking up and down stairs and providing access to green space.



















## **QUALITY EDUCATION**

4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university.

The ACE Mentor Program is an after school program that introduces high school students to careers in architecture, construction management and engineering. The program is taught by the committed and enthusiastic participation of volunteer mentors who are practicing professionals in their respective fields. By working with real professionals in real work environments, ACE students receive an invaluable hands-on education by learning to understand the day-to-day workings of the ACE industries. ACE's mission is to inform and excite high school students about career opportunities; encourage students to pursue secondary and post-secondary education that will prepare them for careers in the integrated construction industry; and support the development of basic and technical skills through mentoring relationships.

The ACE Mentor Affiliate of Chicago was established in 2000 and has a fourteen-year partnership with the Chicago Public Schools (CPS). Since then, more than 1,500 high school juniors and seniors from 36 Chicago public schools have participated in the program. ACE Chicago places a special focus on recruiting minority and female students; groups that are significantly underrepresented in the construction and design industry, and in professional occupations overall. 93% of participants are minority and 30% are female.

ACE not only engages sponsors and volunteer mentors to expose students to real-world opportunities, it financially supports each student's continued success through scholarships and grants. Since inception, ACE national has awarded over \$15 million in scholarships to promising participants.

Teams are composed of 15-25 students and their industry mentors. The program runs every year from November to April, and students meet at a downtown office once a week for two hours. Students learn about each of the tree disciplines through lectures, activities and site visits. They also work together to develop a design project with their teammates. At the end of the year, all the teams gather for a final presentation night. Here they present their designs to other teams, their families, teachers, prospective mentors and the affiliate administrators so all can share in the students' accomplishments.

AS+GG is a host firm for the ACE program in Chicago, representing the Architecture firm on Team 8 and receiving students in our office. Not only do we support the program by allowing a fantastic group of mentors to volunteer their time to the program, we also help with providing student meals, materials and actively take part in both the Executive Board and Associate Board of ACE.

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## **GENDER EQUALITY**

5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision making in political, economic and public life.

Females account for 36% of our architectural staff, which is slightly higher than the national average of 34% for the profession. In a traditionally male dominated industry, we actively seek to provide equal opportunities for men and women working within the firm.

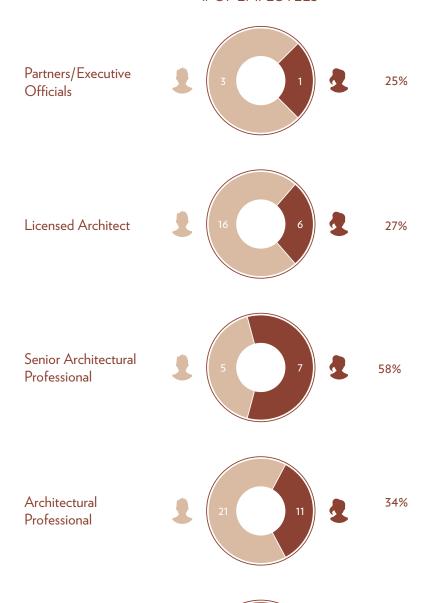
Regarding the influence on gender equality beyond our firm, we include consideration of gender balance within the organizational chart of potential contractors in the formal tender evaluations process. Contractors who have placed women in senior technical positions are rewarded with a higher score.







### # OF EMPLOYEES





### OFFICE BUILDINGS NON-POTABLE WATER STRATEGY

#### **SUMMARY**

Each building's plumbing system collects condensate (from air handling units located on the roofs and in the basements), grey water (from hand-wash basins and showers), municipal treated Sewage Effluent (TSE) and rainwater (when available) and diverts it to a state-of-the-art ultra-filtration system in the basement of each building that treats it to the highest level to produce a non-potable water supply that is used to flush all toilets and urinals. The Volume of TSE used to supplement building generated waste water is adjusted through a smart monitoring system to ensure that Total Dissolved Salt concentration (TDS) remains low. This system is powered by the building's photovoltaic array system and so is free of CO<sub>2</sub> emissions.

Each building saves more than 1,500 m³ of potable water per year and 33 tons of CO, emissions.



#### **EXAMPLE OF SINGLE BUILDING DATA**

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec	Annual Totals
CONDENSATE													Totals
Average monthly condensate Collection (m³)		2.00	19.90	15.00	31.00	68.60	90.00	86.40	87.90	55.40	49.30	8.90	514.40
GREYWATER													
Monthly grey water recovery (m³) from LEED¹	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	834.6
RAIN WATER													
Average monthly precipitation <sup>2</sup> (mm)	14.10	15.20	18.40	5.90	2.10	0.00	0.90	0.90	0.90	0.20	3.10	18.10	79.80
Collectible volume (m³)	11.1	12.0	14.5	4.7	1.7	0	0.7	0.7	0.7	0.2	2.4	14.3	63.0
TSE													
Average monthly volume required (m³)	59.8	57.00	36.8	51.4	38.5	2.9	0.00	0.00	0.00	15.8	19.6	47.9	329.8
TOTAL													
Total Recycled (less 10% filtration adjustment) (m³)		127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	1270	1524.1
Monthly WC Flushing demand from LEED <sup>3</sup> (m <sup>3</sup> )		127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	127.0	1524.1
Monthly Non-Potable Water Supply (%)		100	100	100	100	100	113	112	112	100	100	100	

- 1. Grey water is calculated as the total volume from public layatory faucets and shower heads.
- 2. Precipitation data from the Climate Report.
- 3. WC flushing demand from the LEED calculator.





## **CLEAN WATER AND SANITATION**

6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.

Almost all of our projects include:

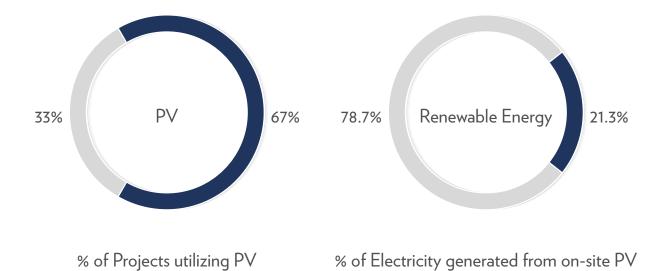
- o Collection of grey water, condensate, rainwater and cooling tower effluent for treatment and reuse within the building or for landscape irrigation.
- o Zero use of potable water for landscape irrigation.
- 6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.
  - Specify significant reductions in sanitary equipment flow rates and flush volumes to reduce total amount of water used.
- 6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes.
  - As a means of reducing run-off and simultaneously reducing potable water demand, all of our masterplans and all of the building site-designs achieve a minimum of 80% management of rainwater through on-site methods either through rainwater harvesting for re-use or infiltration in the ground.
- 6.B Support and strengthen the participation of local communities in improving water and sanitation management.
  - Our water reduction strategies demonstrate leadership and inspire others to do the same thing.

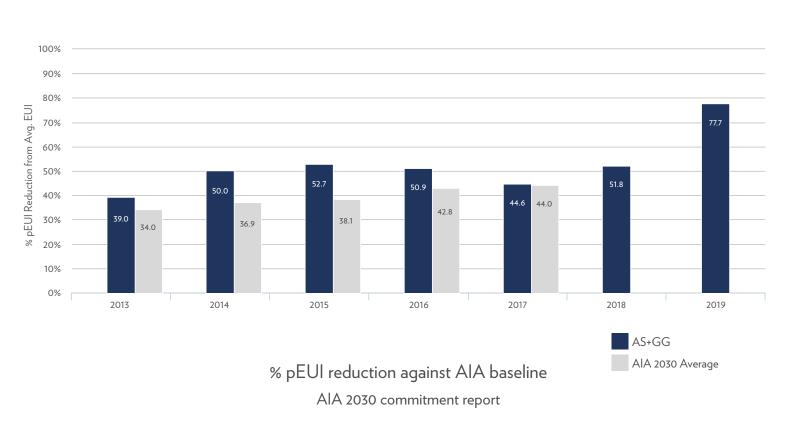
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## AFFORDABLE AND CLEAN ENERGY

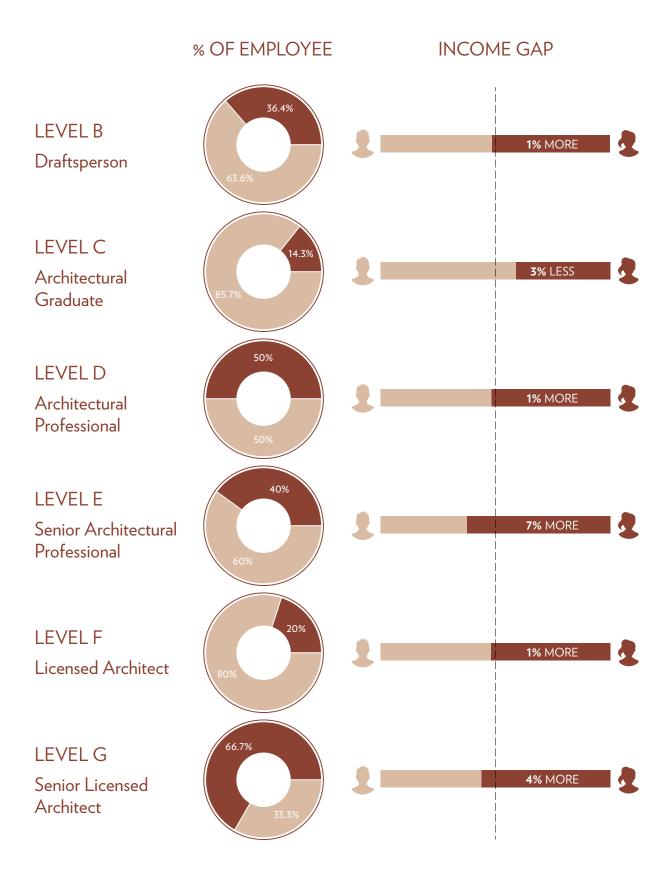
- 7.2 By 2030, increase substantially the share of renewable energy in the global energy
  - Many of our buildings have a significant renewable energy component, typically roof-mounted photovoltaics (PVs).
  - 67% of our projects have PVs and of these projects renewable energy accounts for 21.3% of actual energy demand.
- 7.3 By 2030, double the global rate of improvement in energy efficiency.
  - We are committed to meeting the AIA 2030 target, which requires our buildings to be net zero carbon by 2030. Each year we report to AIA on our progress.
  - Each year we have performed above average and in most years the energy reduction performance has been significantly better than most of our peers.
  - All of our current designs target a 30% improvement against ASHRAE 90.1 (2016) Energy Efficiency Standard.



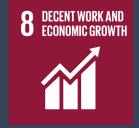


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## DECENT WORK AND ECONOMIC GROWTH

8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.

AS+GG is constantly reviewing staff salaries to ensure there is no pay gap between genders within the same grade. The salaries structure within AS+GG rewards staff based on merit, responsibility, experience and other performance related parameters. Currently, on average, women are paid slightly more than men.

We are developing a strategy to provide better opportunities for people of minority and disadvantaged demographic groups to seek employment within the firm.

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## REDUCED INEQUALITIES

10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.

We have staff from 13 nationalities, representing cultures and religions from across the world.

10.3 Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard.

We have firm policies that prohibit discrimination for any reason at any level.







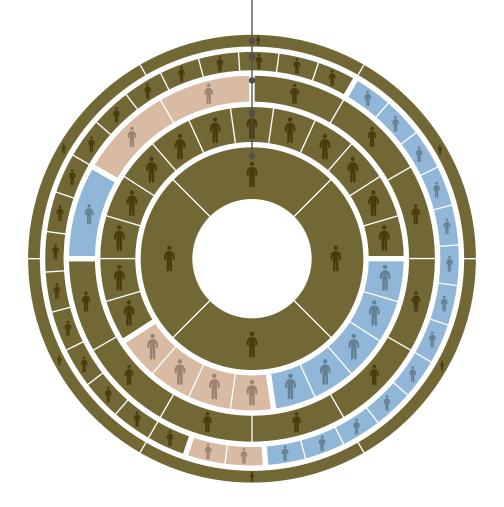
Administrative Support Workers

Architectural Professional

Senior Architectural Professional

Licensed Architect

Partners/Executive Officials





White



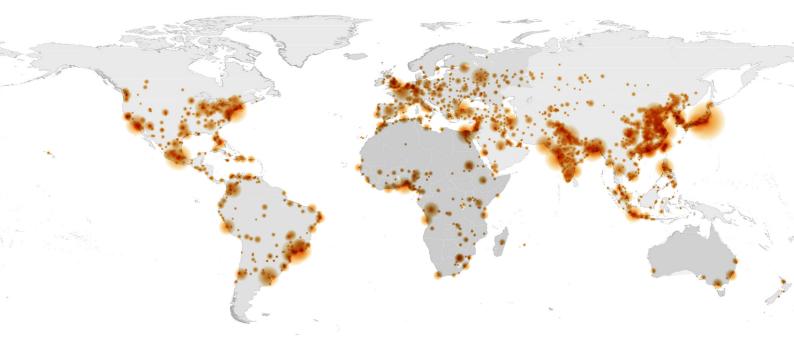
Hispanic



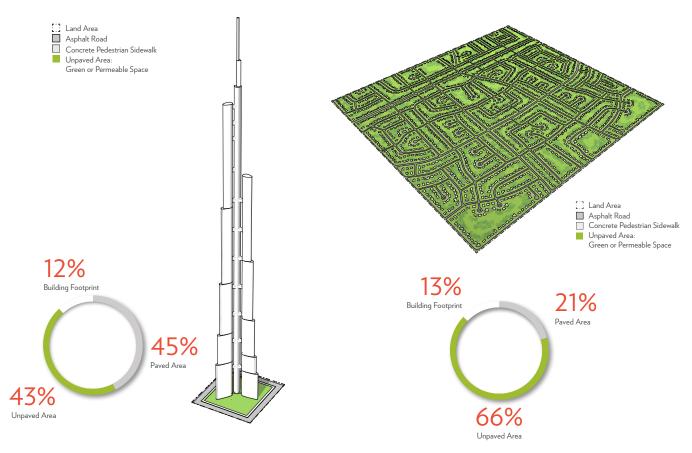
Asian

Firm Workforce Ethnicity





Settlements with a Population of Greater than 300,000, 2015



Land Use of Different Building Prototypes



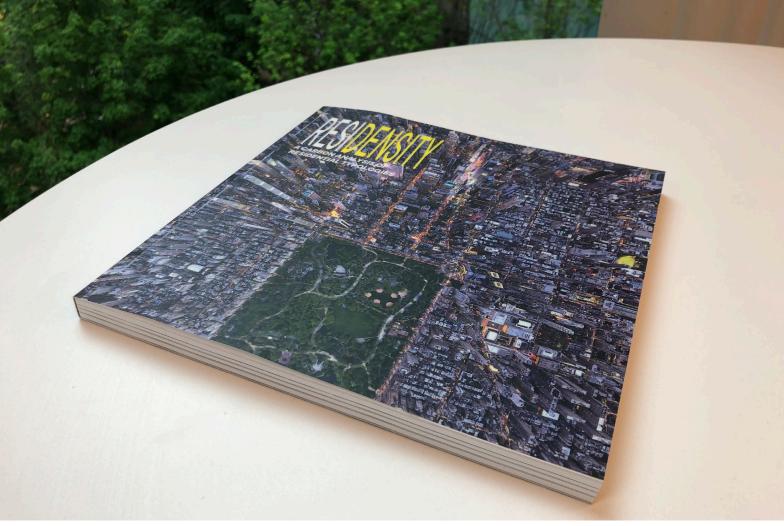


## SUSTAINABLE CITIES AND COMMUNITIES

11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries.

We released a major self-driven research piece, entitled RESIDENSITY – a carbon analysis of residential typologies, in 2018. The intent of the book is to advance the state of knowledge regarding sustainable urbanization. The premise was to create 9 communities of 2000 single family homes at a range of scales from Megatall tower, where all homes were in one single building, to urban and suburban neighborhoods with 2000 individual single-family homes. For each community we assessed its impact in terms of land use, energy, transportation and lifecycle carbon emissions.

Residensity has been published so that all can learn from it.





## RESPONSIBLE PRODUCTION AND CONSUMPTION

12.3 By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest.

AS+GG has tackled this from two aspects. Firstly, the way we operate as a firm:

- o We have moved towards being paperless in the design process through utilizing new technology for reviewing designs.
- o We have taken steps to eliminate single use plastic items and plastic packaging from our staff kitchen.
- o We will be introducing a food waste composting program by the end of 2019.
- o We are updating our policy on lunch and learns to further reduce waste generation and food wastage.

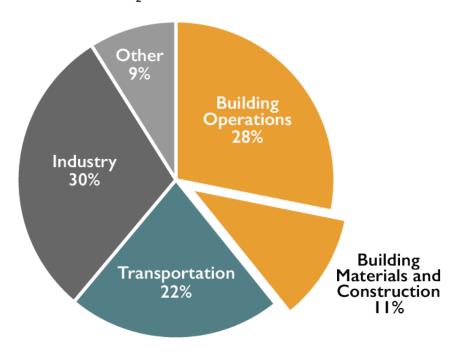
And secondly from a design perspective:

- o In 2018 we adapted our curtain wall specifications to include embodied carbon targets. These apply primarily to concrete, steel, aluminum and insulation products.
- o For concrete we worked with local and national industry bodies to establish targets. For steel we established targets that required a 10% improvement against world steel average and for aluminum we established a requirement for providers to meet a region-specific embodied carbon target either through changing manufacturing and material supply processes or through procuring Gold Standard carbon offsets. For insulation we prohibited the use of HCFC and HFC blowing agents as well as formaldehyde in the manufacturing process.
- 12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.
  - AS+GG has strong focus on materials use in our buildings. We know that the built environment is responsible for 39% of global CO2 emissions. We aim to expand our current practice of life cycle analysis to include actual quantities of materials used and not just design quantities. This will identify further opportunities for reducing materials wastage.





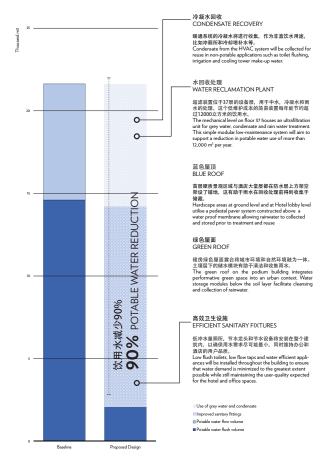
Global CO<sub>2</sub> Emission by Sector

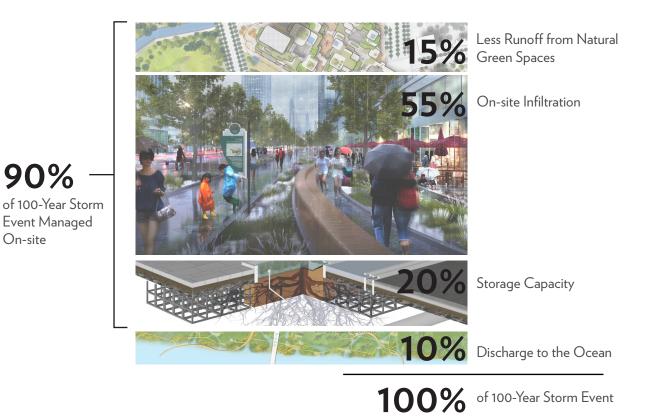


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Communication on Progress 2018

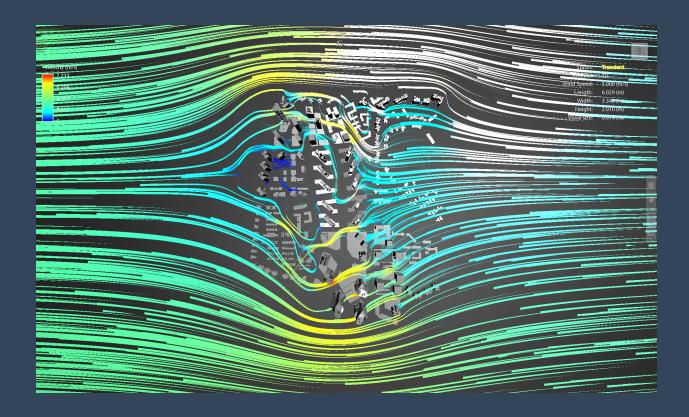
On-site



## **CLIMATE ACTION**

13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.

As a multi-disciplinary design firm with a strong urban design / city design practice, AS+GG is aware of the impact of climate change on the built and natural environment. We actively seek to ensure resiliency through considering it through the design and through ensuring that simulations include projected climate change scenarios.







## LIFE BELOW WATER

14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.

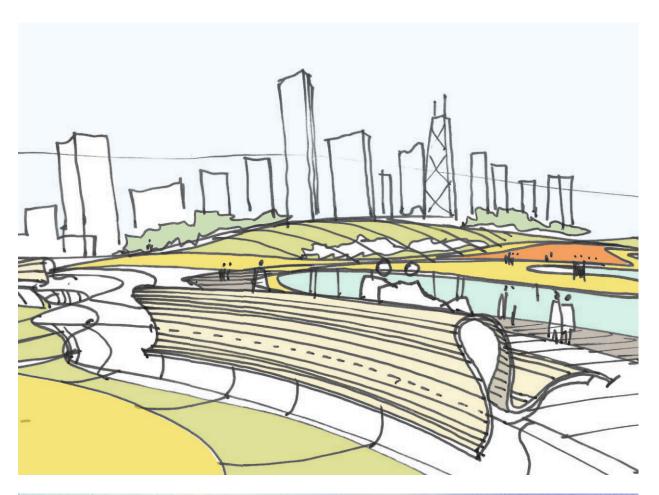
Although our office activities are far from the oceans, we feel that, especially with the current heightened awareness of marine plastic pollution, eliminating single use plastics in the office is a good start. In the first quarter 2019 we took the following first steps:

- o Eliminated plastic drinking straws
- o Eliminated single use creamers
- o Eliminated disposable plastic coffee cup covers
- o Requested lunch and learn providers to not include plastic cutlery

We undertook an internal desk-top research study to promote internal awareness of the impact of plastic on the marine ecosystem. This research was presented to the firm by the team that undertook it in advance of our plastics reduction initiative.

Our Construction Environmental Management Plans (CEMP) for projects where we are engaged to undertake construction supervision services require contractors to recycle plastics from the site with 90% diversion from landfill.













### LIFE ON LAND

- 15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and dry-lands, in line with obligations under international agreements.
  - We requested that our sub-consultants update their standard landscape specifications to prohibit the use of herbicides, pesticides and artificial fertilizers on all projects that AS+GG is involved with. This helps to protect pollinator species, native plants and protect water bodies and water courses from pollution.
- 15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species
  - Our designs have a strong focus on the creation of green space, use of native or climate adapted vegetation and restoration of natural biodiversity. We always develop Key Performance Indicators around green area ratio and accessibility to green space. On virtually all of our projects, the intended outcome is to leave the project with more green space than it started off with.



### **SUMMARY**

Martha Thorne, Executive Director of The Pritzker Architecture Prize, and Paloma Durán, Director of the Sustainable Development Goals Fund (SDGF) wrote that "Architects can directly shape the outcomes of a design process to the betterment of a community's overall quality of life, sustainability, social equity, health and resilience'. This statement echoes the fundamental beliefs of our firm and it is reflected in our day-to-day business operations and the products of our designs.

We intend to issue a major update to our office environmental policy during the final quarter of 2019. It will include new initiatives around indoor environmental quality as waste as waste reduction and reporting procedures.

One of the reasons for choosing to report on the SDGs was to establish a baseline for future reporting and to guide the development of our AS+GG 2025 sustainability road-map, which will establish targets and an implementation plan for how we work and how our designs will perform within the next 6 years.

We look forward to presenting our 2025 plan in the next Communication on Progress Report.





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