COP-GLOBAL COMPACT

BIG - BJARKE INGELS GROUP

BIG

OUR COMMITMENT

This Communication on Progress breaks the standard in that our communicating to you is our assurance that we continue to support the Global Compact principles on corporate social responsibility. Corporate social responsibility – to some, just modern buzz words. But, at BIG, it a way of doing business. It is BIG's way of doing business, across the business and we, the 8 partners, are pleased to place our signatures herewith to assure Global Compact that we are committed to the continuous respect for the human race and its environment.

As our reach becomes increasingly international, we have the ears of more individuals, government leaders and industry colleagues. Our ideas spread and new collaborations become possible. More ideas are shared across companies, allowing for increased idea development, as it is the lack of innovation which impedes achieving solutions. Global Compact is BIG's stamp of integrity on sustainability and innovation. We choose to contribute.

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OUR INTRODUCTION

Architecture is never triggered by a single event, never conceived by a single mind, and never shaped by a single hand. Neither is it the direct materialization of a personal agenda or pure ideals, but rather the result of an ongoing adaptation to the multiple conflicting forces flowing through society. We architects don't control the city – we can only aspire to intervene.

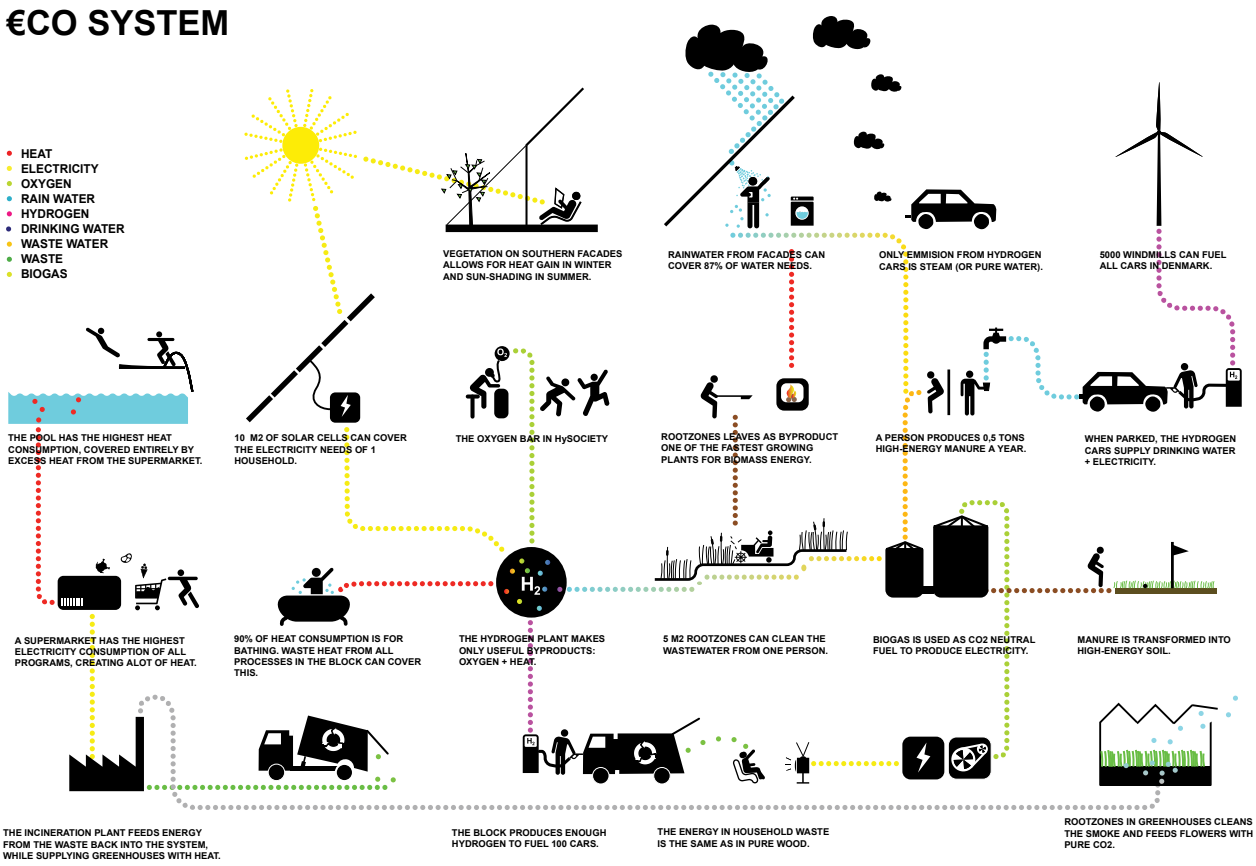
Architecture evolves from the collision of political, economical, functional, logistical, cultural, structural, environmental and social interests, as well as interest yet unnamed and unforeseen. It is through improvisation and adaptation to unanticipated obstacles that we make our biggest breakthroughs. The friction of reality is our insurance against architectural inbreeding. Rather than whining about resistance, obstacles or failure, we say yes to reality, the city, and life, when we bump into it. And we get so much more in return. Yes is more!

OUR ENVIRONMENT

We have always incorporated sustainable initiatives into our projects. In almost every instance these initiatives are not discretionary or additive in nature, but constitute the formative acts around which subsequent design solutions are conceived. Where possible, our buildings are sited to optimize solar orientation, and many integrate inventive day light measures through the introduction of atria, light wells, like monitors and skylights.

Buildings are complex networks of diverse systems operating on multiple scales across time. Our architecture explores ways to artfully interweave these systems around the programs they support. This systems approach can often enable the selective removal and replacement of one with minimal disruption to others. These strategies allow for ongoing life cycle by reducing material, money and time dedicated to maintenance. We are proud to be rooted in the Danish tradition of seeking alternative means to balance the energy resources we use in our daily life and would like to bring this innovative spirit to all of our projects.

The premise of these projects is based on our belief that architecture is not about style but about substance and the very methods and processes that underlie its making. To further our understanding of architecture and develop new ways to see, design and make the products around us, we dedicate 5% of our gross revenues to ongoing research. This commitment to research brings added value and important innovation to our commissioned architectural projects.



LITTLE DENMARK

What if Denmark had an energy bill of 0?

BIG believes that today's environmental problems are not political, economic or even ecological – they are simply a design challenge! Little Denmark is an urban super block that contains a cross section of Denmark, boiled down to a living and work setting for 1500 people, in which all currently available environmental technologies are being deployed in the most ecolomically profitable way.

Housing uses energy for heating, offices spend energy on cooling. A supermarket uses energy on cooling refrigerators; a pool uses energy for heating. If combined, the supermarket could heat the pool with the excess heat from the refrigeration. In 100,000 m2, Little Denmark combines all aspects of city life in a symbiosis of economical and ecological sustainability.

Little Denmark is a test tube in which to demonstrate that sustainability is not a question of science fiction but rather applied science. By following the natural propensity of each program we have organized the entire space so that each program claims its optimum position in the whole.

The shapes of the volumes are optimized for solar energy. The optimum location for the different programs is determined by solar orientation, urban adjacencies and proximity to symbiotic neighbours. In Little Denmark, we examine all aspects of city like in a symbiosis of economical and ecological sustainability.
The Chicago Athenaeum awarded it the Green Good Design Award in 2009.

Almost like a Darwinian design evolution, we select and adapt the fittest forms to the lives we want to live and not the other way around. We strive with a utopian ambition to proactively propose visions without waiting for a competition to be announced or a client to call.

SHENZHEN ENERGY MANSION

The Shenzhen Energy Mansion will appear as a subtle mutation of the classic skyscraper – a natural evolution, rather than a desperate evolution. The tropical climate of Shenzhen calls for a new approach to designing office buildings. How can we create comfortable working spaces in a tropical climate while reducing energy consumption? We propose a tower based on an efficient and well-proven floor plan, enclosed in a skin specifically modified and optimized for the local climate. We propose to enhance the sustainable performance of the building drastically by only focusing on its envelope, the façade.

The skyscraper has evolved as an economically efficient way to provide flexible, functional and well illuminated work spaces for dense populations of professionals. It has however evolved at a time, when air conditioning and electric lighting were merely seen as modern solutions to modern demand, with no thought of the environmental consequences or energy shortage.

Today, the skyscraper needs to evolve into a new sustainable species. It must retain its highly evolved qualities, such as flexibility, daylight, view, density and general usability, while evolving new and untested attributes such as ways of combining maximum daylight exposure with minimal sunshine or integrated ways of limiting the need for cooling.

We propose to make the Shenzhen Energy Mansion the first specimen of a new species of office buildings that exploit the buildings interface with the external elements – sun, daylight, air humidity, wind – as a source to create a maximum comfort and quality inside. By folding the façade in an origami-like structure, we achieve a structure with closed and open parts. The closed parts provide a high-insulation façade which blocking the direct sunlight. On the outside, the closed parts are fitted with solar thermal heat panels that are powering the air condition and providing dehumidification for the working spaces.

The folded wall provides a free view through clear glass in one direction, and creates a condition of plenty of diffused daylight by reflecting the direct sun between the interior panels. Even when the sun comes directly from east or west, the main part of the solar rays are reflected off the glass due to the flat angle on the window. The reflected rays increase the efficiency of the solar thermal energy panels. The combination of minimal passive solar heating as well as active solar panels will reduce the building consumption by more than 60%.

ZIRA ISLAND

The island deploys the three abundant resources – sun, water and wind – to achieve its zero carbon footprint. A model for future sustainable urban development, the Seven Peaks of Azerbaijan is a master plan for a Zero Energy culture. Zira Island is designed to be a sustainable model for urban development, and an iconographic skyline recognizable from the city's coastline. We propose an architectural landscape derived from the natural landscape of Azerbaijan. The seven mountains are conceived not only as metaphors, but engineered as entire eco-systems, a model for future sustainable urban development.

The vision of Zira Island is to create an island that is entirely independent of external resources. A self contained island. By combining the best of Azerbaijan building tradition with the newest technology, combining high-end living with low end resource usage. The Seven Peaks of Azerbaijan proposes an architectural landscape derived from its natural landscape. This new architecture not only recreates the iconic silhouettes of the seven peaks, but more importantly creates an autonomous ecosystem where the flow of air, water, heat and energy are channeled in almost natural ways. A mountain creates biotopes and eco-niches, it channels water and stores heat, it provides viewpoints and valleys, access and shelter. The Seven Peaks are conceived not only as icons, but engineered as entire eco-systems, a model for future sustainable urban development.

WIND – Baku is known as "the wind swept city", and by harvesting the wind energy through an offshore wind farm, Zira Island will have its own CO_2-neutral power supply. The wind turbines will power the entire island, transforming the platforms and foundations of the existing offshore oil industry and replacing the forest of oil towers in the horizon of the Caspian Sea.

SUN – The buildings of the island are entirely heated and cooled by heat pumps connecting to the surrounding Caspian Sea. Solar heat panels integrated in the architecture create a steady supply of hot water, while photovoltaic on strategically located façades and roof tops power daytime functions such as swimming pools and aqua parks.

WATER – Waste water and storm water is collected and led to a waste water treatment plant, where it is cleaned, processed and recycled for irrigation. The solid parts of the waste water are processed and composted and finally turned into top soil, fertilizing the island. The constant irrigation and fertilizing of the island supports the lush green condition of a tropical island, with a minimal ecological footprint.

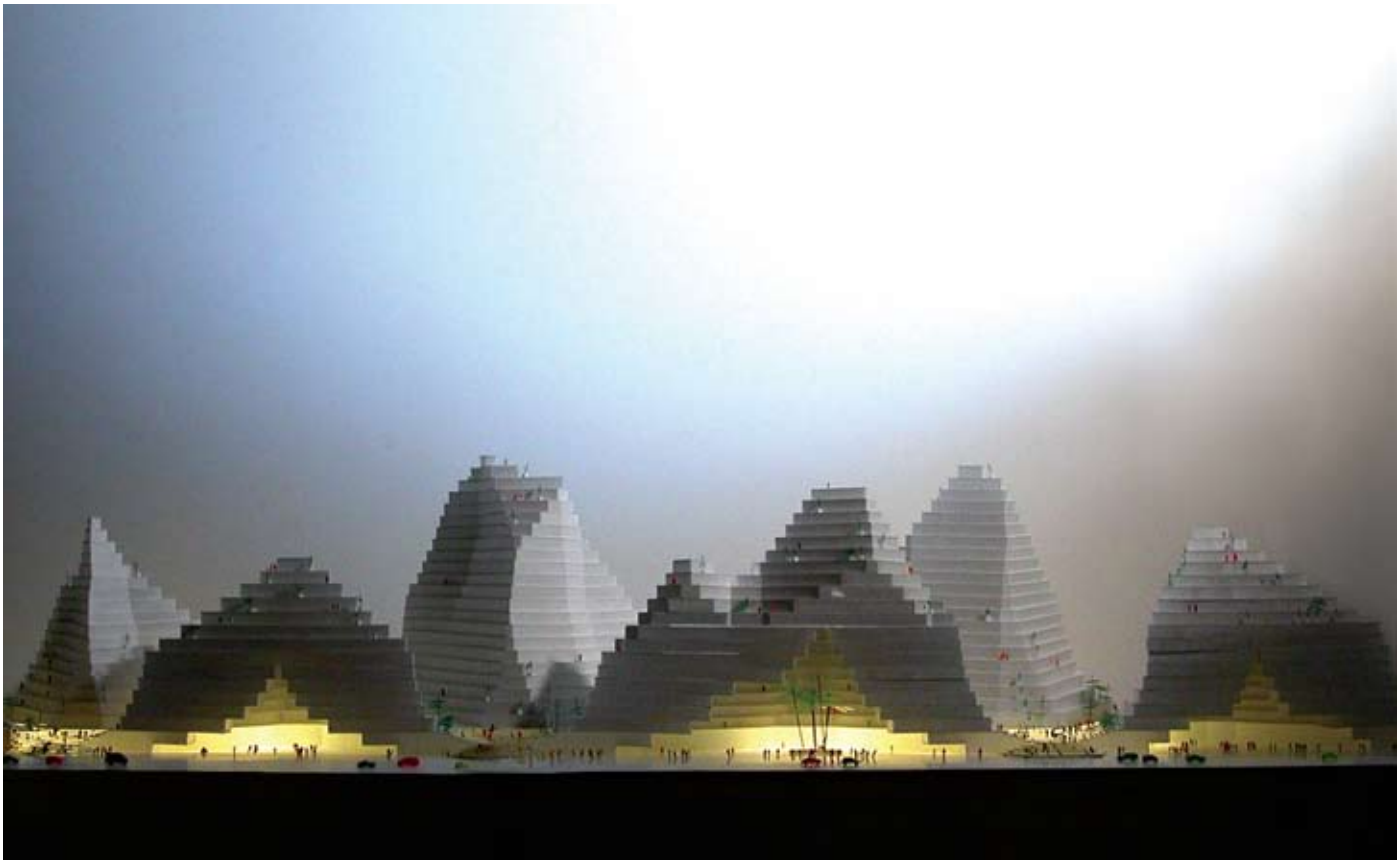
"This project will cause the carbon emissions of people living there to decline over the next decade" – Lars Ostenfeld Riemann, Ramboll's Group Director

OUR HUMAN RIGHTS

A human right is an indisputable universal truth.

The biggest challenge we faced with regard to human rights is our reach, for BIG extends primarily to its immediate environment, being the city of Copenhagen. A city like Copenhagen does not face starvation, or a lack of running water. There is public healthcare and education. Everyone has a right to a fair trial, they have freedom of speech and are generally safe from violence. In a place like Copenhagen, where basic needs are met, what becomes the need to which we have a human right?

We determined that everyone has a right to a chance. A chance to be safe. A chance for a future. A chance for integration. A chance for religious freedom.



THE BATTERY

Like many countries in Europe, Denmark has become home to many foreigners, particularly immigrants from Muslim nations. Denmark exists on a welfare system, and unfortunately, over the last 20 years, this has been grossly exploited by some foreigners, resulting in the creation of an underlying resentment in the Danish people toward all immigrants regardless of their level of contribution to society.

This can be seen in the strong opposition there is generally against the existence of a mosque in Denmark. Although there is religious freedom to the extent that believers may pray, there is no actual space which takes the shape of a mosque.

When BIG was invited to design a space of 124,000 square meters to be placed somewhere in Copenhagen, we jumped at the chance at interspersing this mixed housing and commercial area with a mosque. We worked with Muslims to gain a complete understanding of their requirements and desires, sketching and designing a space for them to their specifications to give them an opportunity to practice their faith.

Therefore, this project is about integration. It seeks to integrate all aspects of city life into a unified environment; it seeks to facilitate the cultural integration of Islamic and Danish culture; it seeks to bring together three disparate and disjoined quarters of south Copenhagen into one overlapping urban activity centre.

A dome at the heart of the development will become the first mosque built on Danish soil: a promise of a fertile future for the coexistence of Islamic and Danish society.

Despite the designs for this project resulting in anonymous threats against BIG, the project, the City of Copenhagen, the individual architects and politicians involved, the intent remains to build it, and it is expected to break ground in the Spring of 2011.

We are excited and encouraged that our collaboration will result in giving the new Danish Muslims the right to practice their faith.


INDGANG

SJAKKET YOUTH CENTRE

Copenhagen is seeing an increasing trend in youths, typically first or second generation immigrant youths from low income and low social classes, dropping out of school, hanging out on the streets and getting picked up by gangs. We believe that encouragement to engage in other activities could be a way to stem this trend. This, of course, required a facility which would allow them to get off the streets and give them an identity that was not related to gangs.

How do you create something that even street kids would find cool?

By converting a run-down factory into a base camp, the youth were given an alternative place to get off the streets. Sjakket, a skate-boarding landscape, has become a community centre to mainly immigrant youths and as such it serves a significant role in the area, keeping potential troublemakers off the streets.

The exterior gables and structural walls were subject to strict rules of preservation. The generous barrel vaulted spaces of the former factory are given new functions – one filled, the other emptied. A half pipe sun deck is wedged between the two vaults. This raised terrace is in many ways a secret oasis for the kids. The Ghetto Noise Studio bridges the 2 arches, like a beat box beacon to draw in the area's youths. Partly an autonomous component of Sjakket's work, the Ghetto Noise Studio shouts out the identity to all in the neighbourhood.

The buildings are renovated in a way to incorporate as much of the existing buildings as possible and overlaying a futuristic and bright environment for the young people who use Sjakket. The former industrial buildings serve as a backdrop to the more current urban street culture as seen in the preserved graffiti and the rich use of colour throughout the building. Instead of removing the graffiti, it because a source of inspiration for the colour scheme.

The main purpose of the refurbishment of Sjakket was to create a place that serves many different function and age groups, but most importantly, which could make a strong, positive statement that there existed a place to pick up the kids who had the potential to become the 'lost' kids in the society. Additionally, by listening to the centre's users and leaders, as well as the surrounding neighbours, the focus was set on integration rather than alienation.

OUR BIG GOALS

ENVIRONMENT

Our initial instinct was to look outwards – how could our business fit into the needs for preservation of the environment? Our goal is, therefore, to look inward – how can we ensure that we contribute to the preservation of the environment?

We are in the process of implementing a recycling program, which recycles not only paper materials, but also can recycle the plastic and foam materials we use for model building.

In our continuous quest to ally with forward thinking researchers and collaborators, we will be collaborating with DTU on a three year project to investigate architectural engineering and to develop the use of super lightweight construction, which has been discovered to reduce carbon emissions by 50%. It is a contribution to Global Compact's ultimate goal of "a low carbon economy being the economy of the future".

We are seeking funding for green energy research and development, as SMEs like BIG struggle to develop the technologies required without help from governments. Our goal is to attempt to collaborate with governments within the EU for research on passive house standards, which involves controlling low energy usage through 15 kilowatt hours per square meter per year. This is being specifically implemented in Tallinn's new town hall.

HUMAN RIGHTS

Our ongoing goal is to ensure that human rights are developed and supported in the designs of our projects. BIG gives students from across the globe the opportunity to work as architects on our projects. As part of this teaching process, BIG invites internal and external experts to lecture on a variety of areas.

We will endeavour to spread BIG's policy on human rights by hosting a lecture on this particular corporate responsibility, at a minimum, once a year, to ensure that it remains at the forefront of the minds of our colleagues.

LABOUR RIGHTS

This is an area of responsibility into which we have not actively ventured. Naturally, in our daily working procedures, we are conscious that we are not discriminatory on any grounds, be they sex, colour, creed, background or age.
We would like set 2 goals:

1. Draft a policy on anti-discrimination within the hiring process and ensure that this is implemented across the business.
2. Draft a policy on anti-harassment, to be implemented internally across BIG.

The next step is to try to influence our collaborators on projects to ensure that similar policies are implemented and protected on project sites.

ANTI-CORRUPTION

Whilst it is inarguably a responsibility which BIG supports, it is the most challenging of all the principles to actively implement. BIG neither subscribes to nor encourages any form of corruption. BIG will not participate in corruption; BIG will not contribute to corruption; BIG will not support corruption.

The new town hall in Tallinn reflects BIG's vision for this corporate responsibility: transparency. Good governance and participatory democracy are dependent on transparency in both directions. It requires adequate overview of the problems, demands and desires of the public, as well as public insight into the political processes. The public servants will not be remote administrators making decisions behind thick walls, but will be visible in their daily work from all over the marketplace via the light wells and courtyards. From outside, the panoramic windows allow the citizens to see their city at work. In reverse, the public servants will be able to look toward the marketplace making sure that the city and its citizens are never out of sight or out of mind.

BIG is a company in development. Our success is creating an interest in BIG, which allows our reach to spread beyond the borders of Denmark. Press and media worldwide disseminate information about our groundbreaking projects and exhibitions of our models and work philosophies ensure that our way of thinking is promoted. Our ultimate goal is that our working culture will inspire and encourage our followers to implement similar initiatives.

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