



## Eko Atlantic

### The Dream of A New Model City struggling with Transparency, Good Governance and Negative Environmental Impacts

"The future of humanity lies in cities: in good urban governance and sustainable urban development" - Kofi Annan

Lagos is one of the fastest growing cities in the world; the city offers hope for survival, income generation, employment and personal success not only to Nigerians from all over the country but also to Africans from the West African region. It has been characterized by a burgeoning population of high poverty percentage, living in limited space that is threatened by sea level rise, ocean surge and unpredictable weather events. A new city called Eko Atlantic is promoted nationally and internationally as a model PublicPrivatePartnership between Lagos State Government and South Energyx Nigeria Ltd to protect Lagos from flooding and ocean surge, to offer new habitable space for residents and businesses and to create new employment opportunities. It is expected that an imposing skyline of towers housing the headquarters of banks, insurance companies and hotels will remind visitors and investors of the successful development of Dubai. But does this project really provide the necessary answer for the approximately 15 million inhabitants (with another estimated 6000 people arriving daily) to achieve sustainable economic growth for all under increased climate stress? The approach taken so far by the involved parties - the Federal Government, Lagos State Government and South Energyx Nigeria Ltd - leaves room for doubt. Community Conservation and Development Initiatives (CCDI), Environmental Law Research Institute (ELRI), the Heinrich Böll Stiftung (hbs) and a number of professionals in the fields of environmental law, architecture and urban planning, marine research and oceanography came together to examine the "Draft Final Environmental Impact Assessment Report" submitted to the Federal Ministry by the developers in 2011. A closer look reveals that the project lacks transparency, participation and doesn't always adhere to the rule of law. The facts and worries expressed by the professionals are summarized in this fact sheet, individual opinion papers are enclosed for further reading.

#### Land Reclamation and its Impacts on the Communities

##### **What the developers say<sup>1</sup>:**

95 million cubic metres of sand have to be dredged from marine shelf waters to reclaim 900 hectares of land for the

project. An 8km long wall made from tens of thousands of concrete blocks (accropodes) weighing 5 tons each is expected to protect the new city as well as Lagos from ocean surge. The 78 years certificate of occupancy was signed between Lagos State and South Energyx Nigeria in 2006 as an answer to the constant flooding of Bar Beach. Lagos State complained that by then Federal Government of Nigeria had failed its obligation to develop and find a lasting solution. The reclamation for the foundation of the project started in February 2008, an area of more than three million square metres of land has already been reclaimed by the first quarter of 2012. By then the "Great Wall of Lagos" was already well over 3 kilometres long and is growing at the rate of about 6 metres a day.

#### **Concerns:**

***The sand and block digging for the project needs to be closely monitored by the appropriate government authorities.***

***The offshore dredging can increase the energy of the ocean waves which will be diverted to the eastern coast when hitting the new "Great Wall".***

***Have the tides and wave strength undergone a long term monitoring before commencement of the project? On which data do the foreign simulations rely on?***

***There is need for provisions to hold the developers responsible for long term negative impacts caused by the project.***

#### **What the critiques say:**

Research has shown that the current stock of offshore sand would be inadequate for such a project. Over the years, the offshore sand bed of the ocean in the Lagos area has not been replenished naturally. This is due to factors such as the sand drifts along the West African coast, where – amongst

<sup>1</sup> If not otherwise indicated, the information from the developers are taken from their website [www.ecoatlanticcity.org](http://www.ecoatlanticcity.org), their marketing brochure and from the press conference held at Eko-Hotel, Lagos on 25 May 2012

others - the port constructions of Lome and Cotonou have reduced the amount of sand deposited in the Lagos area. The sand currently extracted for Eko Atlantic City yields only 30% of pure sand per ton, whilst the remaining percentage is made up of mud and silt, which is not suitable for construction. This increases the amount of sand needed to be dredged from the ocean. It has been estimated that over 300 million cubic meters of sand rather than the claimed 95 million are needed to fill the area for the proposed project. And continued structural development will even increase erosion as waves remove sand from underneath them (refraction); without sediment replenishment, the problems will escalate. The dredging can increase the energy of the waves before they hit the shore. When they are now diverted and push along the new "Great Wall" of Eko Atlantic City they are likely to gather more speed and thus would be hitting the shore in vulnerable areas such as Alfa Beach. The current dredging by a private project in federal government territory even seems to be done without the necessary monitoring by a government agency or experts although the delicate sand situation would require close monitoring to ensure that the dredging is done correctly. It is not clear whether the tides and the strength of the waves have been adequately measured over a longer time period to collect data indispensable for a reliable simulation and calculation in foreign labs.

The comparison with constructions in Dubai, which were raised out of the sea on a much larger scale, does not apply to the sand situation around Lagos: the Persian Gulf surrounding Dubai is regularly replenished, there is no lack of sand with the fall back of an inland desert. Contrary to the rough waters in the Atlantic Ocean, the Persian Gulf is not deep and its gentle waves favour the implementation of such gigantic projects.

Today, the coast line along Victoria Island/Lekki is the most dynamic beach in Nigeria, as at 2009 it eroded by an average of 6m (Victoria Island) and 12m (Lekki) every year as can be seen from a GCLME/UNILAG research based on satellite images done between 1985 and 2009 (see below). It would now be interesting to see the rate of erosion between 2009 – 2011 to determine how much the construction and sand filling has affected the erosion since the commencement of the project.

### Concerns:

**The EIA was submitted 3 years after the commencement of dredging activities. This is a contravention to the rules of the EIA Act 2004. There is no evidence that FME approved the construction.**

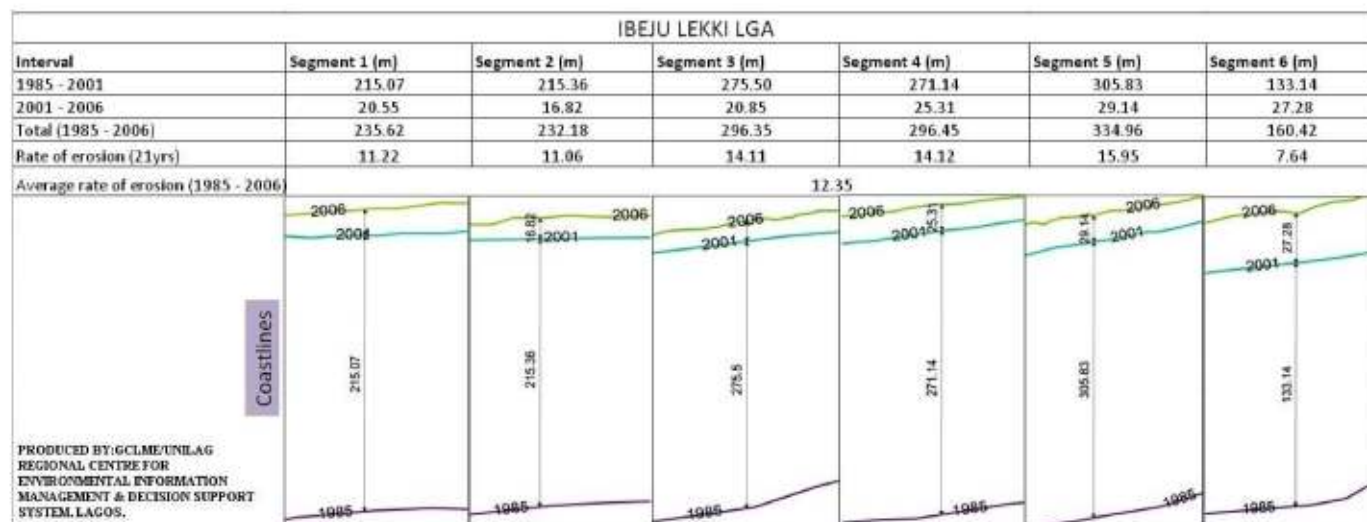
**The affected communities were never involved in the project plans. Meanwhile, serious erosion is happening along the coastal areas identified as vulnerable in the "draft final EIA".**

**The affected areas have to be protected immediately; at the same time a consensus discussion is needed to find alternative solutions to the proposed hard coastal structures.**

### Environmental Impact Assessment Procedure and Report

The Environmental Impact Assessment (EIA) Act 2004 provides that an EIA must be carried out before embarking on any developmental project. According to a press release from May 25, 2012 issued by the Lagos State Commissioner for Waterfront Development and Infrastructure and South Energyx Nigeria: "...the EIA was submitted to the Federal Ministry of Environment and underwent public consultation in November 2011. In January 2012 the Nigerian Federal Ministry of Environment gave EIA approval for Eko Atlantic reclamation works and sea wall protection...". It was announced that the EIA would be put on the developer's website.

The reclamation work had actually been ongoing since 2008. This means that in respect of the Eko Atlantic City project, **the procedures detailed by section 60 of the EIA Act have not been respected, as dredging started before the EIA was carried out.**



A "Draft Final Environmental Impact Assessment (EIA) Report" submitted by Royal Haskoning to the Federal Ministry of Environment (FmoE) for **Phase I of the Eko Atlantic City Development Project** in April 2011 can be sighted at the library of the Federal Ministry of Environment in Abuja. It was displayed to the public from 13 July 2011 to 10 August 2011. But a categorical statement or direct evidence is missing that this EIA was undertaken in accordance with laid down procedure under the provisions of the Environmental Impact Assessment Act, 2004 through an application in writing to the Federal Ministry of Environment. There is also no concrete evidence of the FmoE's decision whether the project was allowed to commence or not. The Federal Government and especially the Federal Ministry of Environment have to be held responsible for obviously allowing the implementation of a project with huge environmental implications without the necessary approval and without discussing alternative solutions.

The "Draft Final EIA" available at the FmoE confirms **that the project might shift the erosion of Bar Beach eastwards with a major adverse effect of 3km to the east and a moderate adverse effect up to 10km to the east** (page 6-176). The S-shape design of the project is supposed to minimise those effects. In addition, a three phase monitoring and mitigation program was suggested with close monitoring during and after the construction phase and, ultimately, beach nourishment if required. The document proposes that if erosion becomes problematic, hard coastal structures should be considered – without being more specific. The necessary stakeholders' involvement was limited to local communities at Lighthouse Creek, Middle Creek or Badagry Creek, all located on the westward side of the Eko Atlantic City construction site and not affected by its impacts. The communities along the eastward side of the construction, where waves are likely to hit the shore with higher speed and potential for damage, i.e. communities along the Lekki - Epe axis were not part of the consultation processes.

#### **What the communities experience:**

Okun Alfa community has been in existence for over 600 years and is today part of Ward C of the Eti-Osa Local Government. Its main occupation is fishing, farming and trading. This has been affected by several ocean surges and the dredging activities at Alfa Beach. Whilst ocean surges are a natural phenomenon, the dredging and sand filling activities increase their impact. The devastating effects of a massive surge in July 2011 finally destroyed the only health centre, electricity poles and the only access road. Within a year, the village lost its mosque and the bore hole for drinking water were contaminated by sea water. Other areas currently experiencing threat of extinction are Goshen Estate and Kuramo Beach.

In general, records show that storm surges, flash floods and rainfall during the last decades in Lagos have been higher than predicted. Hunting and fishing used to constitute the greater percentage of the livelihoods in the coastal communities of Lagos. With the forests and wetlands areas now drastically reduced, the inshore waters polluted from urban waste disposal, dredging and shipping, those

communities in Lekki and Eti-Osa are facing severe economic and ecological challenges. Unlike their richer compatriots, the poorer members of society in these vulnerable areas do not have the funds for necessary sand filling to elevate their houses nor do they have the funds to easily move away from the disasters they experience periodically.

#### **What other countries do:**

Nigeria and especially Lagos might need a paradigm shift in their coastal management just like the Dutch did in recent years. The Netherlands faces today raising sea levels, more extreme coastal storm, erosion and more rain as well as drought. The old "higher dikes" approach is no longer sustainable and affordable, so the Netherlands is learning to adapt and to live with water, and not always fight it. Their approach changed away from flood resistance at any cost to flood accommodation wherever possible. Similarly, on the coast of the southern Indian State of Tamil Nadu, villages adjoining thick mangrove forests were saved from the tsunami in December 2004, according to the UNESCO chair for ecotechnology, M.S.Swaminathan, because of the speed-breaker role played by the mangroves. In villages where mangroves had been destroyed either for fuel wood or aquaculture ponds, several hundred fishermen died. The coastal mangroves of Lagos have been slashed to make way for infrastructure and housing development, leaving an unprotected coastal area to subsidence, storm surges and sea level rise, and inundation from rainfall. Whilst artificial wetlands are created in many coastal cities around the globe to allow excess water find its way, Lagos is dredging up marine sediments to sandfill and drain valuable wetlands that once functioned as a sponge, soaking up excess precipitation, and spill-over from ocean floods. Yet, Nigeria is a signatory to the RAMSAR Convention on Wetlands, an intergovernmental treaty adopted in 1971 on the wise use of wetlands.

#### **What role does the project play for the future of the Megacity Lagos and its citizens?**

#### **What the developers say:**

According to the draft EIA, the project is supposed to protect the valued land on Victoria Island from further erosion, to provide high value land for future development, to create employment opportunities for skilled and unskilled personnel, to raise the profile of Lagos, to offer reduced traffic and better public amenities and to introduce a sustainable city concept. The headquarters of Nigeria's banks, insurances and other financial institutions currently spread along Victoria Island and extension as well as Marina should be centred on Eko Atlantic City to enable better networking and reduce traffic in those areas.

#### **What architects and urban planners say:**

A **sustainable city concept** based on renewable energy technology like waste to energy, an energy efficient building code and transport system **respecting the needs of both the rich and the poor** would be a highly welcome step towards a model Megacity. The information available from the developer's website and exhibition hall at Bar Beach does

not link the current concept to such sustainable building and urban planning standards. The new city development is not even part of the Mabogunje Lagos Master Plan of April 2006 nor of the current Lekki Master Plan. This explains why the project creates such an unease amongst citizens in the neighboring areas: the plan of a four-lane access road linking Ahmadu Bello Way to the new city development does not allay fears that the few existing exits from Victoria Island to the mainland cannot absorb additional 250,000 people. Evacuation plans for worst case scenarios of flooding after ocean surges have to be made public and discussed since prospective commercial investors will be responsible for the safety of their employees.

**Concerns:**

*The sustainability concept of the developers does not seem to include core issues like renewable energy, energy efficient building, waste to energy.*

*It is not clear which kind of permanent jobs the project will create.*

*Neighbouring communities will have difficulties to cope with increased infrastructural pressure caused by the project.*

*The project is likely to increase social differences within the Lagos society and might create deeper divisions between rich and poor with all its consequences.*

**Economic growth and creation of employment** is an important criteria for a Megacity which has to cope with regular influx of mainly unskilled citizens. The **nature and number of permanent jobs** the project intends to create should be specified to be able to weigh the benefits against negative longterm environmental impacts. The intention to relocate all the banks' head offices from Marina and Victoria Island to have a financial centre suggests that existing employment will rather be simply relocated to another geographical area. What will happen to the empty buildings at Marina and Victoria Island? Experience shows that abandoned buildings quickly attract squatters and thus might devalue the current high brow areas. What about all the "support staff" like security guards, drivers, housekeepers necessary for the smooth functioning of the businesses and residences. Where and how will they live, where can they find affordable lunch and food?

Similarly, the **financial costs of this PPP project for tax payers** (what exactly is the financial contribution of the "public" stakeholder) have to be disclosed to alleviate fears about an enormous **financial burden the project might leave for the next generation**. Or can the promoters of Eko Atlantic, their bankers and insurers be made **liable for any collateral damage** that the grafting of this project may cause to Lagos and its citizens, and other affected people of the ECOWAS coastal region in the longterm?

70% of the citizens in Lagos live in informal settlements and about 70% of the population earn their living in the informal sector. It is internationally recognised that the informal sector will continue to play an important economic role and will offer significant security and income opportunities to the majority of the citizens in developing countries. In Lagos, the informal economy contributes indeed a considerable part to the economic development with its creativity, flexibility and energy. The current urban and economic development philosophy gives the impression that poorer parts of the society are rather ignored and the informal economy is seen as a "threat". Meanwhile, sustainable and successful Megacities will be judged in future by their capability of integrating all citizens into their society, offering decent housing, education and income earning opportunities and thus achieving social justice. The city of Dubai is not necessarily known for these values, wouldn't it be wiser for the citizens of Lagos and its government to define their own unique way of achieving them?

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