



LEARNING NOTE

BUILT ENVIRONMENT SEMINAR II

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| Date | Thursday, 22 September 2011 |
| City, Country | Durban, South Africa |
| Event | MILE Built Environment Seminar II |
| Theme | The Implications of Climate Change For Managing the Built Environment |
| Leading University | The Durban University of Technology (DUT) |

Summary of Experience

The Built Environment Seminar II was opened with a joint welcome by **Mr Derek Naidoo**, Deputy City Manager of Procurement and Infrastructure within eThekweni Municipality; and **Professor Ahmed Cassim Bawa**, Vice Chancellor of the Durban University of Technology.

Mr Naidoo acknowledged the importance of this collaborative partnership for the city and its academic institutions and showed his full support on the series of seminars which are to follow. Professor Bawa also emphasized the vital importance of the partnership. In relation to the seminar topic, he pointed out that this is an “exciting time for Durban” as COP 17 will be held in our city later this year. He expressed that the city of Durban has the potential to become greater than any South African city if we keep working together to enhance the collaboration between our city and partnering academic institutions.

Professor Theo Andrew, Executive Dean of the Faculty of Engineering at the Durban University of Technology highlighted that the session fundamentally reflected on the Memorandum of Agreement (MOA) between the city and its institutions. The Built Environment Seminar has given effect to the sharing of expertise, knowledge and resources between the partners.

Thought Leader, **Dr Debra Roberts**, Deputy Head of The Environmental Planning and Climate Protection Department, within eThekweni Municipality, was the lead presenter of the day. Dr Robert’s presentation immediately captured attention of the audience with startling statistics on current and predicted impacts of climate change. The presentation revealed that we are currently exceeding the worst conditions that scientists have predicted. The world’s civilisation is continually engaging in activities which are contributing the degradation of our natural and built environment. Statistics have revealed that we are losing 150 000 people per annum due to the phenomenon. This is occurring as a result of people’s geographical positioning and poor levels of adaptation. In addition to the loss of lives, we are facing water insecurity, sea level rise and the collapse of the Amazon forest. The World Bank estimates that the cost of adaptation will be between \$80 - \$100 billion per annum.

The most extraordinary prediction revealed during Dr Roberts's presentation is that the continent of Africa is at highest risk due to our location and inadequate resources for adaptation. In 40 years we will need to build an entirely new urban infrastructure. Dr Roberts noted that we are at the tipping point of reaching danger levels related to rapidly increasing CO₂ levels measured in parts per million. Scientific research has concluded that the 20th century, branded as the century of oil and petroleum, will contribute to about 2ppm annually. Thanks to fossil fuel emissions, the CO₂ levels currently measure 392ppm, exceeding the CO₂ safe level of 350 ppm. Adaptation as compared to mitigation was suggested as the most feasible option.

Given that many students and practitioners were not fully aware of the dangers we are facing, the presentation was captivating and very well received by the attendees. It made the audience aware of what is occurring around us and gave everyone an opportunity to think about ways us, as individuals, can address this global issue. At the end of the presentation, there was a short response from panel members, **Professor Matthew Dayomi** (Senior Lecturer at the University of KwaZulu-Natal), **Mr Koos Landman** (Senior Lecturer at Mangosuthu University of Technology), **Mr Alan Hansen** (Senior Lecturer at The Durban University of Technology) and **Derek Morgan** (Deputy Head of eThekweni Municipality's Energy Office).

Professor Dayomi suggested that South Africa will have to make a difficult decision on whether to rely on coal as a source of on energy or to mitigate the harmful effects by choosing alternate, less effective sources of energy. As a Board member of the South African Council for Planners (SACPLAN), he also stated that education on environmental change is essential. Universities curricula are currently being redesigned to include this significant element. Mr Alan Hansen expressed that we need to work towards ways of implementing change. He emphasised that looking at international best practice would be a good starting point.

After a short break, the enthused participants jostled to get the attention of the facilitator during the questions and responses session facilitated by MILE's Senior Manager, **Mr Sogen Moodley**. This lively plenary session provided an appropriate platform for academics, students and practitioners to contribute to the key theme and its implications for the built environment. The session also provided the space for participants to agree on a set of actions to lead the way forward.

Overall Theme Applicability

Climate change is affecting every part of our natural and built environment dramatically. Built environment practitioners essentially seek to provide a safe and controlled environment which supports human activity. This should therefore ensure that development is carried out in such a way that it is responsive to the fast changing natural environment.

Outcomes and Proposals

The seminar evaluation was dominated by positive feedback. It has successfully sparked a wealth of interest and discussion on factors relating to the Climate Change and its implications for the Built Environment. The thought leader listed a number of actions that citizens can start taking to live a

sustainable and responsible life:

- ✓ Drive less
- ✓ Grow your own vegetables
- ✓ Reduce, reuse and recycle
- ✓ Switch to green power
- ✓ Encourage bio-diversity
- ✓ Lessen industry based employment
- ✓ Become a climate champion
- ✓ We need to give effect to fast, flexible, responsive cities
- ✓ Recycle more
- ✓ Check your tyre pressure
- ✓ Use less hot water
- ✓ Avoid packaged products
- ✓ Turn off electrical devices
- ✓ Eat less meat
- ✓ Collect rain water
- ✓ Reuse grey water

Way Forward

- Within the context of South Africa's political history, it is imperative that our political leaders are made aware of the changes occurring in our environment.
- Education on climate change should be promoted at senior and community levels.
- Small changes CAN be made. Champions need to come forward and speak more convincingly about what is occurring.
- The municipality needs to work on a set of guidelines on what could be done differently. These guidelines can be distributed to households in the city.
- Climate Change has social implications for our everyday lives. We need to mitigate the harmful impacts by making small changes in our daily lives.
- There needs to be a focus on altering universities curriculum. All built environment related programmes need to include elements relating climate change and environmental impacts.
- The city and its partners need to look into a viable partnership which would support funding PhD Research.
- A city- institutional working group will be formulated to focus on the seminar outcomes.
- The eThekweni-University Research Committee will reflect on what came from this.
- There needs to be a change in thinking. Current projects are not making the environment a priority.

For more information

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Thought Leader

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