



UNIVERSITY OF  
KWAZULU-NATAL  
INYUVESI  
YAKWAZULU-NATALI

## The Centre for Civil Society

School of Built Environment and Development Studies  
5<sup>th</sup> Floor, Memorial Tower Building, Howard College Campus  
University of KwaZulu-Natal, Durban, 4041, South Africa  
Telephone: +27 (0) 31 260 3577 Fax: +27 (0)31 260 2502  
E-mail: [pbond@mail.ngo.za](mailto:pbond@mail.ngo.za) Website: <http://ccs.ukzn.ac.za>

---

22 November 2013

Ms Noluthando Skaka  
Secretary of Committee: Economic Development Portfolio Committee  
Email: [nskaka@parliament.gov.za](mailto:nskaka@parliament.gov.za)  
Fax: 086 505 5618

To the Economic Development Portfolio Committee

This letter confirms that our Centre would like to make formal inputs regarding climate change, within the parliamentary deliberations on the Infrastructure Development Bill (IDB).

The fast-track 18 day deadline for comments allows us, at this stage, only to alert you that there are crucial problems with the Bill that we hope you will take into consideration. If you agree, we would have a much more detailed submission for you, available in coming days.

Our experience with mega-projects ranging from the Transnet multi-product petrol pipeline from Durban to Johannesburg to the current Strategic Infrastructure Project #2 – especially the Durban port/petrochemical expansion – is that the current authorities' perspective on climate change is extremely primitive. As we read the IDB, this problem will be amplified by excessive haste.

We should immediately confirm our desire to see widespread expansion of infrastructure to meet basic needs (we are the world's most protest-rich society because of the lack of such infrastructure). We also have strong views on the need for much more sustainable economic development strategies, than are currently pursued. These points we would be delighted to expand upon, if desired.

However, our main concern at present is that the world's most important crisis – climate change – is being treated with *de facto* denialism by our leading infrastructure managers, developers and consultants, especially Transnet and the CSIR.

Please review the attached short correspondence and background information about why in Durban, the climate crisis is being both created by inappropriate infrastructure (Sub-Saharan Africa's largest refinery complex and port, as well as an extremely chaotic road freight industry responsible for 7000 accidents – many fatal – in Durban last year) and amplified vulnerability through ignoring extreme weather and higher sea-water levels associated with climate change.

The attached correspondence never received a reply and it strikes us that the Environmental Impact Assessment process allows consultants with a climate-denialist agenda to attempt to fast-track projects such as SIP2 components.

It is this danger that the IDB potentially exacerbates.

Therefore we hope that your committee will take seriously the many infrastructure-related ways that South Africa must cut emissions to reach the targets promised at the Copenhagen and Durban climate summits (as well as in Warsaw this week), namely a 34 percent cut in emissions from the 'growth without constraints' scenario.

We have many ideas, including peer-reviewed academic analysis, to share that we hope will inform IDB deliberations. These relate to the following items you will be considering for fast-track authorisation, which in South Durban are already creating substantial problems in relation to climate change.

- Oil or gas pipelines, refineries or other installations
- Ports and harbours
- Power stations or installations for harnessing any source of energy
- Public roads
- Railways
- Sewage works
- Waste management and disposal
- Water works and water infrastructure

Please be in touch if we can be of further assistance.

Sincerely,



Patrick Bond  
Director, and Senior Professor

DATE: 24 May 2013  
TO: Mr Lerato Mokoena,  
Department of Environmental Affairs  
[LMokoena@environment.gov.za](mailto:LMokoena@environment.gov.za)

Ms Vanessa Brueton  
Nemai Consulting  
147 Bram Fisher Drive, Ferndale  
Email: VanessaB@nemai.co.za

**RE: EIA PUBLIC COMMENT: *Inadequacy of Final EIA Report for the Proposed Berth 203 to 205 Expansion* (NEAS REF NO: DEA/EIA/0000988/2012; DEA REF NO: 14/12/16/3/3/2/275)**

Please consider this a commentary on the inadequate climate change analysis – both with respect to causality and implications – that has been advanced by the Nemai Consulting company and its sub-contractors.

It is evident that even though there has been some improvement in climate analysis after I raised this as a problem (initially in May 2012 and again in November 2012, as noted in correspondence below), there is still a problem of climate denialism.

This is evident insofar as old analysis was used in the most recent document is wildly out of date. The report ZAA 1370 | RPT | 028 REV B is based upon **analysis drawing upon research that is at best five years old.**

This is unacceptable, in a context of dramatically worsening estimates of climate change and rising seawater potential, as well as much more concern about how the post-Kyoto process (e.g. the Durban Platform) will *indeed make shipping and bunker fuels liable for emissions cuts, just as airline emissions cuts began to be mandated by the EU last year.* For an EIA to be grounded in 2008-and-earlier information, and to ignore trends in global environmental policy, suggests that the consultants were not taking their brief seriously. This is the extent of their climate analysis:

*The probability of sudden large rises in sea level (possibly several metres) due to catastrophic failure of large iceshelves (e.g. Church and White, 2006) is considered unlikely this century, but events in Greenland (e.g. Gregory, 2004) and Antarctica (e.g., Bentley, 1997; Thomas et al, 2004) may force a re-evaluation of that assessment in the longer term time scale. In 2008, the UN's expert scientific body on climate change projected that the sea level around the world could rise from anywhere between 180 mm and 580 mm by the end of this century as result of rising ocean temperatures and the melting of glaciers, snow and ice in polar regions.*

The consultants ignored the following paper, which is considered to be the most authoritative regarding maritime emissions commitments and necessary cuts:

Dec 2012 [Executing a Scharnow turn: reconciling shipping emissions with international commitments on climate change](#)

In addition, South Africa's own newly-announced carbon tax will inevitably be applied to shipping, given current trends to incorporate maritime activities. This has simply not

been factored in properly, given the spurious, farcical claim that the vast expansion in shipping that the Berth expansion will facilitate could lead to *lower* CO2e emissions.

There are numerous other more recent scientific studies which the consultants should have taken into consideration, some of which project much higher sea-level rises than were considered likely in studies published five years ago.

For example, James Hanson's most recent interview suggests that a six meter rise was the equivalent sea level when the world was last 2 degrees warmer than today: <http://www.youtube.com/watch?v=YEe2RhdbZso>. Other recent publications, e.g. in *Science* in November 2012, project far higher sea level rises (60%) than 2008 data : <http://www.ottawacitizen.com/technology/Scientists+publish+chilling+report+meltin+g+sheets+rising+levels/7629379/story.html> and <http://thinkprogress.org/climate/2012/11/28/1249391/study-sea-levels-rising-60-faster-than-projected-planet-keeps-warming-as-expected/>

The consultants did an unprofessional job by relying on old data. The entire EIA is compromised, and the idea that there is no climate impact upon such an important project must be rejected. A new EIA is needed, with professional climate scientists, not denialists doing the work.

Sincerely,



Patrick Bond  
Senior Professor and Director, Centre for Civil Society

----- Original Message -----

**Subject:** DCEA comments

**Date:** 0 Nov 2012 11:20:02 +0200

**From:** Patrick Bond <pbond@mail.ngo.za>

**To:** Vanessa Brueton <VanessaB@nemai.co.za>

**CC:** Desmond D'Sa-SDCEA Co-ordinator <desmond@sdceango.co.za>, 'Ivor Aylward' <aylward@gmail.com>, 'Jenny' <research@wessakzn.org.za>, 'Vanessa Black' <vblack@ispace.co.za>, 'Alice Thomson' <alicetho@ispace.co.za>, 'Arisha Govender' <arisha@agrlaw.co.za>, "rmsands@telkomsa.net" <rmsands@telkomsa.net>, 'rico' <rico@groundwork.org.za>, 'Arnia Van Vuuren' <arv@mvweb.co.za>, Nicky Naidoo <NickyN@nemai.co.za>, 'Vanessa Brueton' <vanessa@environment.gov.za>

Vanessa,

I gather the comment period has been extended until 3 December. I would like to add to my commentary on the climate implications of the new port investments. I have come across the 2009 study below, regarding eThekweni water-related climate adaptation concerns; it obviously needs updating to take account of the worsening situation, as will be evident in the forthcoming Intergovernmental Panel on Climate Change report and projections of potential multi-meter sea-level rise in much shorter times than previously estimated (e.g. by Nasa's James Hansen).

This 2009 report underscores the extraordinary failure of your firm to consider climate seriously. I hope you can take the comments on board, and that your subconsultants (especially at CSIR) will get access to this information, so they do not continue to appear as climate denialists.

Relevant excerpts of the report below should make the City and Transnet think twice about the character of port upgrading - and Durban's contribution to potentially catastrophic climate change - and instead redeploy the billions of rands of investments into climate-proofing our port and city instead of making us yet more exposed and vulnerable.

Please confirm that these remarks are received, and that the climate issue will finally be considered in your firm's deliberations.

Thanks,  
Patrick



## Climate Change Municipal Adaptation Plan Health and Water

Final

16 November 2009

[www.tms.com](http://www.tms.com)

*Delivering sustainable solutions in a more competitive world*



Under projected climate change scenarios, cyclones are expected to track further south down the Mozambique Channel increasing the likelihood that severe storms will occur in the Durban region. Even without an increase in the frequency of storms, their severity is projected to increase given the increase in precipitation and sea level rise (Webster, 2005; Swiss Re, 2009).

Wave action will result in increased coastal erosion, damage to coastal habitats and infrastructure and inundation of low lying areas. Roads, bridges, railway lines, storm water and sewerage pipes as well as beachfront property could be washed away (as was the case at Ballito in March 2007). Depending on the severity of this disruption, transport links may be disrupted for considerable periods of time which could have an impact on food security and health services in the region.

Disruptions also undermine the coastal tourism industry through damage or removal of beaches and tourist attractions and damage to access routes.

Disruption to services at the Port of Durban (e.g. damaged cranes and ships) and the existing airport (e.g. flooded runways) could have short to medium term impact on a wide range of businesses, organisations and activities.

High winds disrupt the entry of ships to the Durban harbour and prevent the operation of port-side cranes. High winds in conjunction with coastal erosion, will damage electricity infrastructure, and place new demands on Eskom and the municipality's ability to repair damaged infrastructure quickly and effectively. High winds expose poorly constructed buildings. Falling trees damage property and block transport routes. Hail damages crops, livestock and property (e.g. denting vehicles and causing roofs to collapse in informal settlements) and can block storm water drains preventing drainage and thereby increasing the risk of flooding. Lightning can cause injury, damage infrastructure and fires.

Powerful waves, strong winds and inundation of low lying areas are associated with traffic, building and shipping accidents, isolated communities and loss of human life. This would increase the load on emergency services and health care facilities. Potentially large populations may be displaced from their homes and clean up operations could take days/weeks/months depending on the severity of the storm, placing significant pressure on disaster management resources within the municipality.

On 11/21/2012 2:15 PM, Patrick Bond wrote:  
Vanessa,

I know I speak for SDCEA, which was the main host institution for the civil society movements opposed to climate change - and to official SA inaction on this vital issue - which gathered a year ago at COP17. May I express my disappointment, again, that in your last communications, and in the discussions of climate risks to the harbour, and of the impact of harbour expansion on bunker fuel (CO2) emissions, your agency appears not to be taking this matter seriously.

It seems to me that your agency has not considered government's Green Paper and White Paper on climate, which both insist that we 'limit the average global temperature increase to at least below 2°C above pre-industrial levels', and that warns, 'After 2050, warming is projected to reach around 3–4°C along the coast, and 6–7°C in the interior. With these kinds of temperature increases, life as we know it will change completely.' As one example: '[T]he frequency of storm-flow events and dry spells is projected to increase over much of the country, especially in the east, over much of the Eastern Cape and KwaZulu-Natal'. Durban's sea-level rise is anticipated to be nearly double as fast – close to 3 mm/year – as the South African south coast's in the immediate future, but new research models suggest several more metres of seawater height are possible by the end of the century, swamping central Durban.

Another sure hit to Durban is via the port, Africa's biggest, because of a growing 'reluctance to trade in goods with a high carbon footprint', the Green Paper admits. 'The term "food miles" is used to refer to the distance food is transported from the point of production to the point of consumption, and is increasingly being used as a carbon emission label for food products.' Further 'economic risks' include 'the impacts of climate change regulation, the application of trade barriers, a shift in consumer preferences, and a shift in investor priorities'. Already, Europe's 'directive on aviation and moves to bring maritime emissions into an international emissions reduction regime could significantly impact' South African air freight and shipping. 'Tourism is not just a potential victim of climate change, it also contributes to the causes of climate change,' the Green Paper observes ominously. 'South Africa is a carbon intensive destination, and relies extensively on long haul flights from key international tourism markets.' New air taxes to slow climate change thus create significant risk to South African tourism.

Have these insights been considered, yet?

Below is my semi-official response to the failure of your environmental consultants to take these considerations seriously, when we met at the end of last month. Please add these criticisms of your work to the official record, and please reply.

Thanks,  
Patrick  
(Bluff resident and UKZN academic)

\*\*\*



## Hard lessons from Hurricane Sandy

By Patrick Bond

version in *The Mercury*, 6 November 2012

What did Hurricane Sandy teach us a week ago, here in South Durban where R250 billion is about to be sunk in vast new port capacity, plus tens of billions more into petro-chemical expansion?

Not much, judging by the class dunces I met during Transnet's Environmental Impact Assessment (EIA) process, which last Wednesday included an Open Day at the Seafarer's Club. As Africa's largest port, Durban is facing stiff competition from Maputo for shipments to Gauteng, and perhaps soon from Coega near Port Elizabeth as a regional freight hub. Transnet and eThekweni officials are reacting like clumsy dinosaurs.

But it's hard to ignore last week's storm, which accelerated climate damage, with around R300 billion worth of property destroyed in the northeastern US, about the same cost as the 2010 flooding in Pakistan and as droughts that wiped out world grain crops in between.

As oceans warm, cyclones and hurricanes also amplify, exacerbated by sea-level rise. "The volume of Arctic sea ice has been reduced by 75 percent in just 30 years," reports the world's most respected climate scientist, James Hansen of NASA, speaking last month to the Cornell University Global Labor Institute. "There is a danger that the ice sheets will begin to collapse and we could get several meters of rising sea levels in one year."

At that rate, big parts of central Durban would sink (which genius promoted The Point luxury development without watching the rising shoreline?). Other cities where coastal sprawl has left millions in low-lying danger include Mumbai (2.8 million inhabitants exposed as sea waters rise), Shanghai (2.4 million), Miami (2 million), Alexandria (1.3 million) and Tokyo (1.1 million).

We have had our own mini-Sandy, when on 19 March 2007, according to marine expert Andrew Mather, "wave run-up heights were measured at twelve beaches along the Durban and Ballito coastline and these peaked at 10.57 meters above Mean Sea Level."

Yet two months ago, I got a blank stare from Finance Minister Pravin Gordhan when I asked about climate over lunch, when he visited South Durban's vulnerable Clairwood suburb next to the port. Gordhan spoke to an angry residents' meeting; the little suburb will be squashed by trucks associated with the rezoning that will facilitate creeping Back-of-Ports growth. Nine Clairwood and Bluff residents have been killed in recent years by crazed truck drivers.

Raising the volume of containers trafficked through South Durban annually from two to 20 million is the neoliberal planners' zany objective, as our economy's vulnerability to globalization and inability to produce our own competitive products both worsen.

But the firms – including Nemaï Consultancy and Graham Muller Associates – working for Transnet and the city don't mention climate change in thousands of pages of high-priced reports, either regarding the overall plan or the first stage, a R4 billion berth reconstruction that will dock 'super post-Panamax ships' each carrying more than 15 000 containers, each with the extreme bunker fuel consumption that means shipping contributes a far greater source of climate-frying greenhouse gas emissions than the airline industry.

Yet at the recent Presidential Infrastructure Investment Conference in Sandton, Deputy Public Works Minister Jeremy Cronin conceded, "Too much of our development has been plantation to port, mine to port." Instead, we need "social infrastructure, such as water, hospitals, schools, and housing, in order to prevent the kind of protests witnessed recently in the mining sector."

But try raising these issues with Transnet and its consultants, as I have repeatedly since May. At this time of 'planetary emergency,' to quote Hansen, CSIR's Roy Van Ballegooyen – who entirely ignored climate in his "Modelling of potential environmental change in the port marine environment" report – replied to my concerns last week in pure gobbledygook: "What needs to be assessed is the extent to which the proposed development will modify the response to climate change that would have occurred in the absence of the proposed development."

Another Transnet consultant, Nemaï, replied to me, "The project will decrease the ship waiting and turnaround times which will have a lower carbon impact" – not realizing that if you increase efficiency by reducing the ships' offshore wait, you increase their ability to load, unload and hence raise emissions.

Just weeks after the same berths were damaged during a severe storm which bumped a ship up against the dock cranes, and just 10 months after Durban hosted the United Nations climate summit, it seems that rising sea water levels and storm surges correspond to a new denialism comparable to Thabo Mbeki at the height of the AIDS pandemic.

The operative mandate, applied to SA state investment in general, seems to be "mine more and faster and ship what we mine cheaper and faster", as *Business Day* editor Peter Bruce put it just as Gordhan was finalizing his R845 billion infrastructure budget in February.

And with that pro-corporate philosophy will come awful new household words we never heard before, starting with Marikana and Sandy.

Patrick Bond directs the UKZN Centre for Civil Society; recent books include *Politics of Climate Justice* for UKZN Press and *Durban's Climate Gamble* for UNISA Press.

**From:** Patrick Bond [<mailto:patricksouthafrica@gmail.com>] **On Behalf Of** Patrick Bond  
**Sent:** 05 November 2012 06:51 AM  
**To:** Desmond D'Sa-SDCEA Co-ordinator  
**Cc:** 'Vanessa Brueton'; 'Nicky Naidoo'; 'Timothy Fasheun'; 'VANESSA MACLOU'; 'Vanessa Black'; 'Brenda Pratt'; 'RM Singh & Sons Email'; 'Rake'; 'Rory'; [deepchund@mweb.co.za](mailto:deepchund@mweb.co.za); 'Intern'; 'Rico Euripidou'; 'J Surju'; 'Ted Holden'; [ivoraylward@gmail.com](mailto:ivoraylward@gmail.com); 'Bongani'; Roy Van Ballegooyen  
**Subject:** Re: SDCEA comments

Nicky, you have asked me to pose some specific questions. Did you not see my questions in the correspondence below?

This is now the fourth time I've put these questions to your team, and I am beginning to think your crew are climate denialists.

Thanks if you can demonstrate otherwise,  
Patrick

On 10/26/2012 9:54 AM, Patrick Bond wrote:

Dear Vanessa,

Am I to understand that the full reply to the concerns I raised below is to be found in this box, and nothing more?

Thanks,  
Patrick

\*\*\*

Impact on Durban	Adaptation Interventions			
	Water Management	Health	Disaster Management	Other
<b>Water related impacts - infrastructure and society</b>				
Demand for water purification	Yes	Yes	Yes	
Displaced populations	Yes		Yes	Yes
Drainage system failure	Yes		Yes	
Sewerage system failure	Yes		Yes	
Basement flooding of properties	Yes		Yes	
Damage to houses	Yes		Yes	
Increased urbanisation	Yes	Yes		
Shipping and port disruption			Yes	Yes

**23 CLIMATE CHANGE**

COMMENT / QUERY / ISSUE	RAISED BY	RESPONSE
<b>Source: Correspondence – 05 May 2012</b>		
The Durban COP17 legacy will be damaged by the proposed expansion. The R250 billion infrastructure investment would be better used in building renewable energy, public transport and badly-needed municipal services. The transport sector is pivotal to the transition to a low carbon city... The top priority was identified as the need to reduce the vehicle kilometers travelled in the road freight sector as this provided the greatest opportunity to simultaneously reduce emissions of Greenhouse Gases and traditional air pollutants.	Patrick Bond UKZN Civil Society	The main reason for the project is to improve the safety of the quay walls and to improve the efficiency of the port which will have a positive environmental impact. Other use for funding will not improve safety of the berths.
The following questions were raised: <ul style="list-style-type: none"> <li>Will the expansion take up excessive amounts of South Africa's carbon budget thus impacting on government's pledge decrease emissions after 2020?</li> <li>Has this recommendation by the Academy of Sciences of South Africa, in its 2011 book <i>Towards a Low Carbon City</i>, commissioned by the city, been incorporated?</li> <li>How much additional CO<sub>2</sub> will be emitted by the bunker fuel that is consumed by ships en route to and from Durban as a result of the vast new capacity associated with super post-Panamax ships that</li> </ul>	Patrick Bond UKZN Civil Society	This project will decrease the ship waiting and turnaround times which will have a lower carbon impact. The existing stack capacity of 2.3 million TEU's will remain both post and pre construction. This project does not increase the capacity. The recommendations of the book <i>Towards a Low Carbon City</i> will be considered if applicable and relevant.

On 5/5/2012 4:02 AM, Patrick Bond wrote:  
Dear Vanessa,

My concerns, having taken part in an Open Day tour (for which I am grateful for your firm's hospitality), are that the Durban COP17 legacy in which our city gained world-wide attention, will be wrecked by this project and the associated expansion of the freight and petro-chemical complex to the south of the harbour. This berth expansion is a linchpin in what is said will be a R250 billion infrastructure investment that, in my view, will do far more harm than good, compared for example to use of that money in building renewable energy, public transport and badly-needed municipal services. So my comments and follow-up questions are:

\* by expanding the shipping capacity of Durban harbour to super post-Panamax scale through this R4 billion project, are we going to be taking up excessive amounts of South Africa's carbon budget and therefore ruining the government's pledge to peak and then decrease emissions after 2020?;

\* since expanding the shipping capacity also requires expanding the freight capacity, the danger is that more emissions, congestion, and trucking-related accidents will occur in an area demonstrably unsuitable given lack of road transport and inadequate shifting of freight to rail, so it is critical to inform the public, what is the amount of the new freight capacity being built to handle the much larger shipping and what proportion of this is being anticipated for freight haulage by rail and by trucking respectively?

\* has this recommendation by the Academy of Sciences of South Africa, in its 2011 book *Towards a Low Carbon City*, commissioned by the city, been incorporated? "The transport sector is pivotal to the transition to a low carbon city... The top priority was identified as the need to reduce the vehicle kilometers travelled in the road freight sector as this provided the greatest opportunity to simultaneously reduce emissions of GreenHouse Gases and traditional air pollutants."

\* how much additional CO2 will be emitted by the bunker fuel that is consumed by ships en route to and from Durban as a result of the vast new capacity associated with super post-Panamax ships that will soon be capable of entering our harbour?;

\* how much additional CO2 will be emitted by the trucks that will haul the new freight, assuming this expansion is the crucial link in raising capacity from 2.3 to 5 million containers annually?

I would also like to register concern that the capital-intensive process will not lead to higher numbers of jobs, and that the import of large quantities of manufactured goods made possible by the new berths will further deindustrialise South Africa. Would you please share with the public information about these likely economic and labour market impacts?

Many thanks, I look forward to hearing your replies, as I'm sure do our colleagues on the cc line.