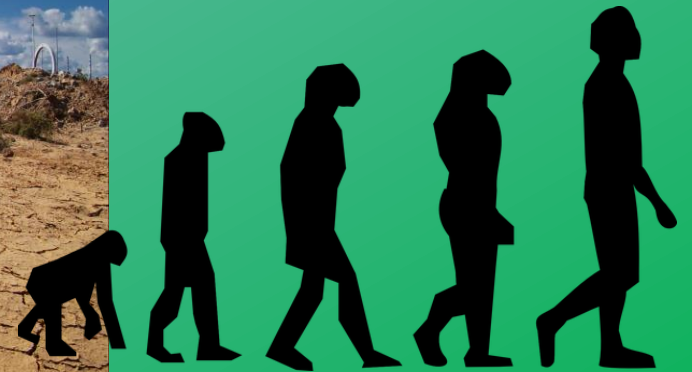


# INTEGRATING CLIMATE CHANGE MITIGATION INTO EIA: REVOLUTION OR EVOLUTION



# INTEGRATING CLIMATE CHANGE MITIGATION INTO EIA: REVOLUTION OR EVOLUTION

1. Introduction
2. Climate Change
3. Carbon Footprint Assessment
4. CFA, Green Buildings and EIA
5. Conclusion and way forward

# 1. Introduction

## Revolution:

- a sudden, radical, or complete change
- a fundamental change in the way of thinking about or visualizing something : a change of paradigm



## Evolution:

- a process of change in a certain direction : UNFOLDING
- a process of continuous change from a lower, simpler, or worse to a higher, more complex, or better state : GROWTH
- the process of working out or developing





## 2. Climate Change

- Welcome to the Anthropocene
- Climate change definition:



*“The climate change phenomenon refers to seasonal changes over a long period with respect to the growing accumulation of greenhouse gases in the atmosphere”.*



- **“long period of time”**

Anthropogenic activity has accelerated seasonal change!

# 2. Climate Change

## Frequent Extreme Weather Events





# 2. Climate Change

## Frequent Extreme Weather Events

### Excessive Rainfall



In its yearly "State of the Climate" report, the World Meteorological Organization (WMO) said the planet's biggest weather woes last year were floods (which swamped some 35 million people), and droughts, which affected another 9 million.

### Drought



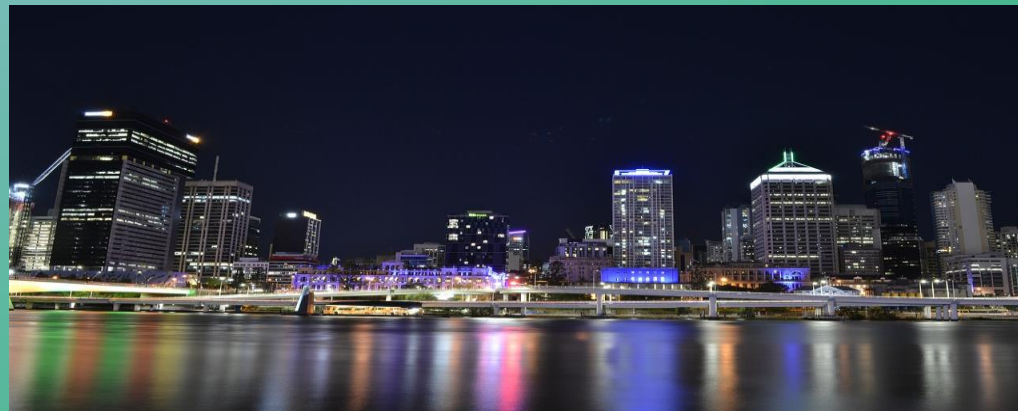


## 2. Climate Change

- **GHG accumulation primarily through the burning of fossil fuels**



- **Buildings are responsible for 30-40% of Carbon Emissions**



# 3. Carbon Footprint Assessment

(With acknowledgement to Nici Palmer of Carbon Calculated)

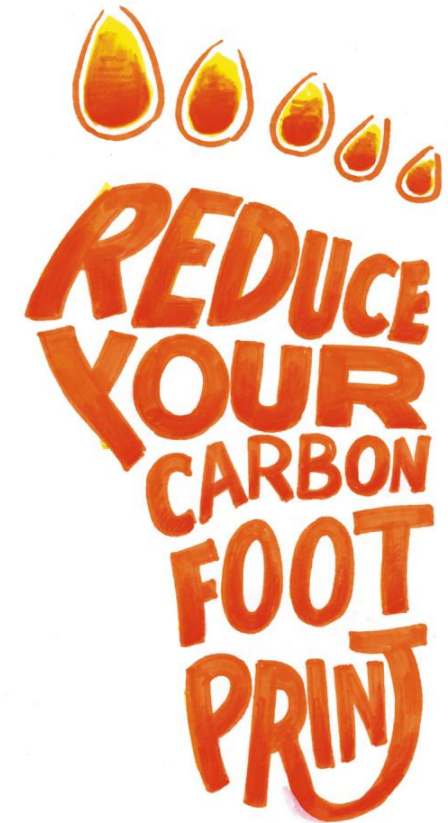




# 3. Carbon Footprint Assessment

## Why do a CFA?

- Intrigue – buzzword
- Moral
- Response to perceived/genuine social & environmental concerns
- The ‘feel good’ factor – reducing our impacts to secure resources for future generations
- Reporting Requirements and Compliance
- Brand reputation
- **CLIMATE CHANGE**



# 3. Carbon Footprint Assessment

## Green Building Certification

- Various forms of certification- LEED, BREEAM, Green Star
- Strict criteria need to be met in order to receive certification
- Reduction in GHG emission, specifically Carbon





# 4. CFA, Green Buildings and EIA

- A large proportion of EIAs involve buildings of some form or concrete structure
- Spatial and visual footprint



- **Why not the Carbon Footprint?**

# 4. CFA, Green Buildings and EIA



+



**EIA**



# 4. Conclusion and Way Forward

- The inclusion of CFA (making use of green building criteria), will provide a tool for environmental assessment practitioners to directly address Climate Change in EIA.
- The green building criteria should provide immediate mitigation measures to offset the negative impact that buildings and concrete structures, potentially have on the natural and social environment.
- CFA needs to be added to the EIA assessment process.



# 4. Conclusion and Way Forward



## Evolution or Revolution?



***“Given the urgency with which we as the human species need to address the negative consequences of climate change, perhaps a radical paradigm shift by way of revolution is required to force EAPs to assess GHG emissions of development projects. If we choose to follow the evolutionary route, we may be too late”***



# Thank you!

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