



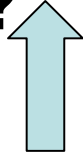
**CENTRE FOR HIGH  
PERFORMANCE COMPUTING**

Jeff Chen

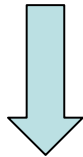
Acting Operations Manager

# Driving Forces?

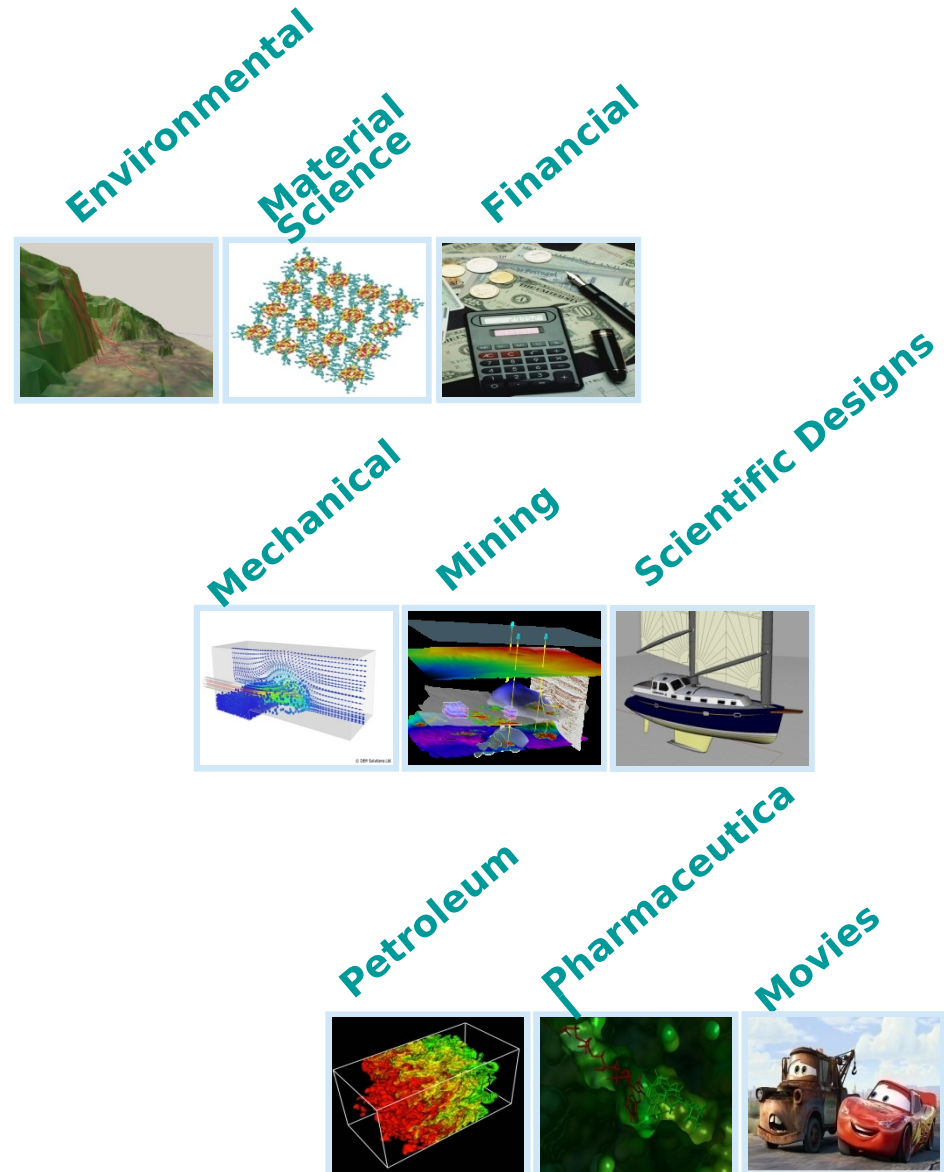
**Labour-based  
Economy?**



**Fast-track knowledge  
generation processes**



**Knowledge-based  
Economy?**



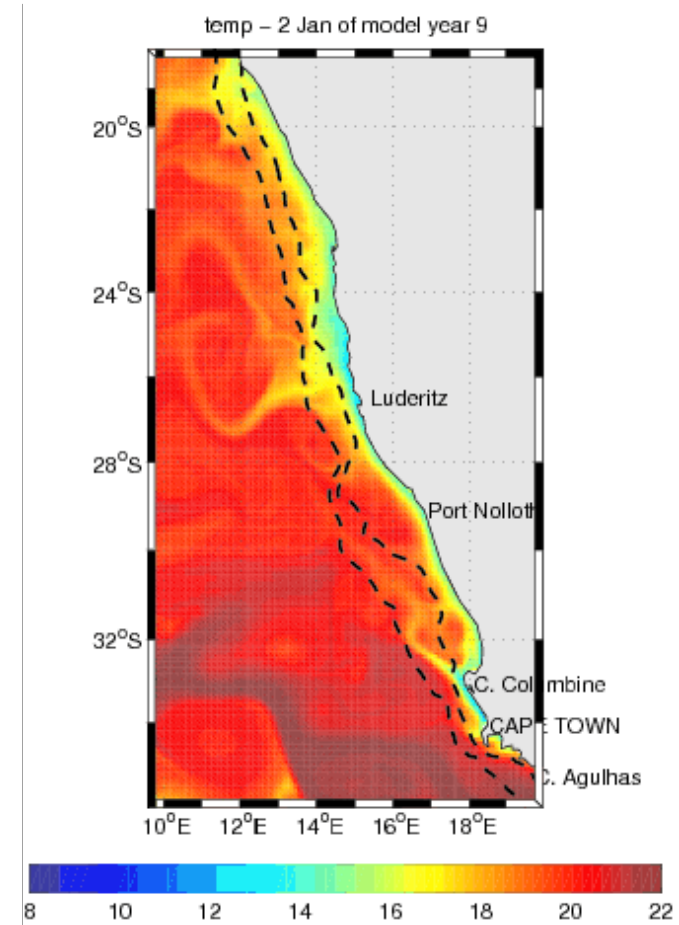
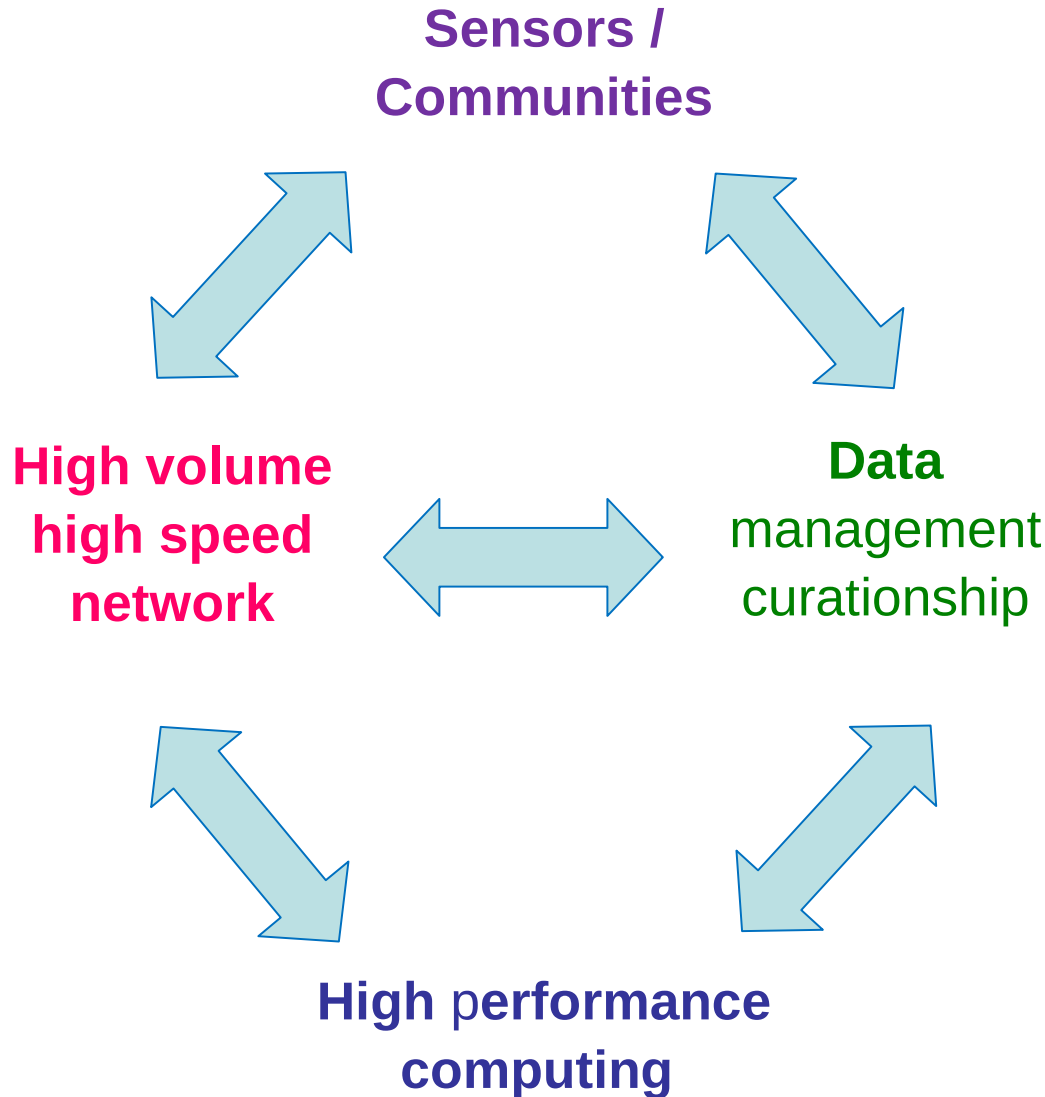
# Chronicle



- 2000: Collaborative HPC initiative among computational scientists.
- 2001: DST recognised potential and importance and invited CSIR as a partner.
- 2004: DST appoints scientific advisory committee and develop business plan.
- 2005: The CHPC incorporated into CSIR's Meraka Institute.
- 2006: Refurbishment of Rosebank Campus.
- 2007: Official launch in June.



# Implement Cyber-Infrastructure and Policies





# Electricity and Cooling System

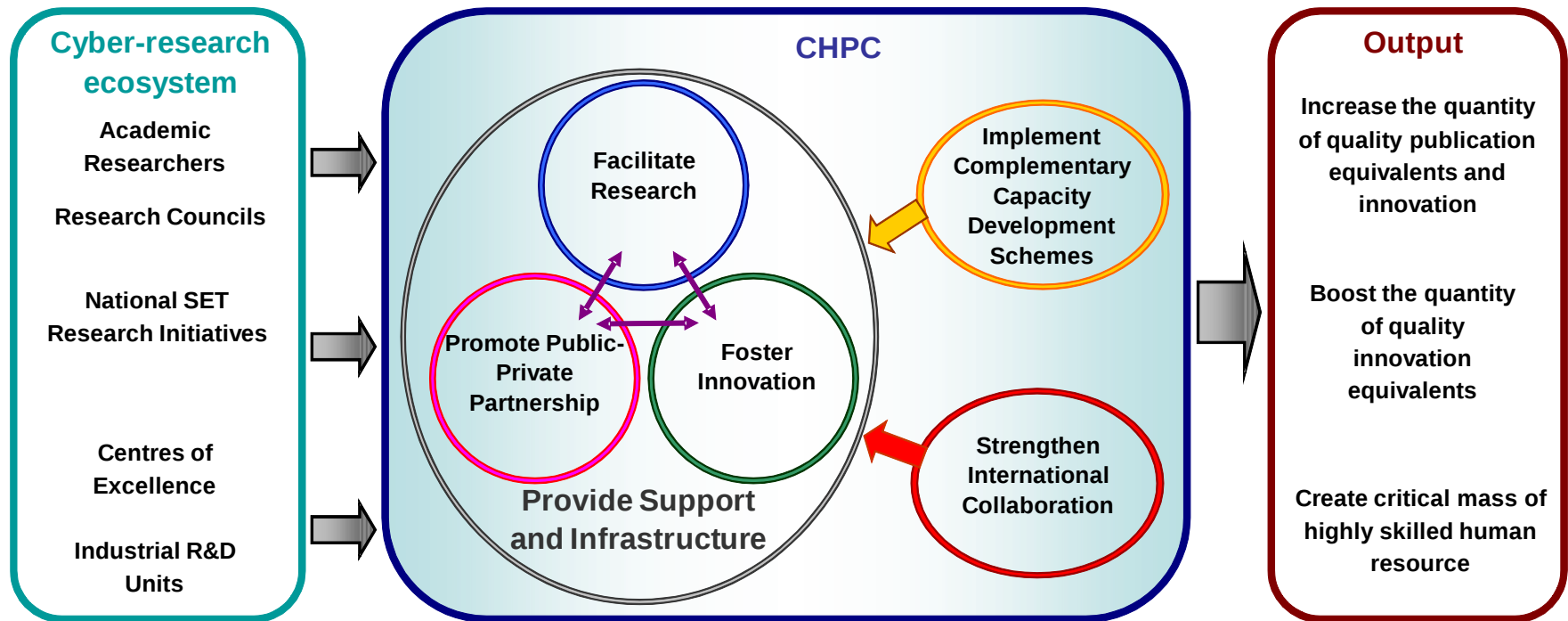


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# Applications and Facilities

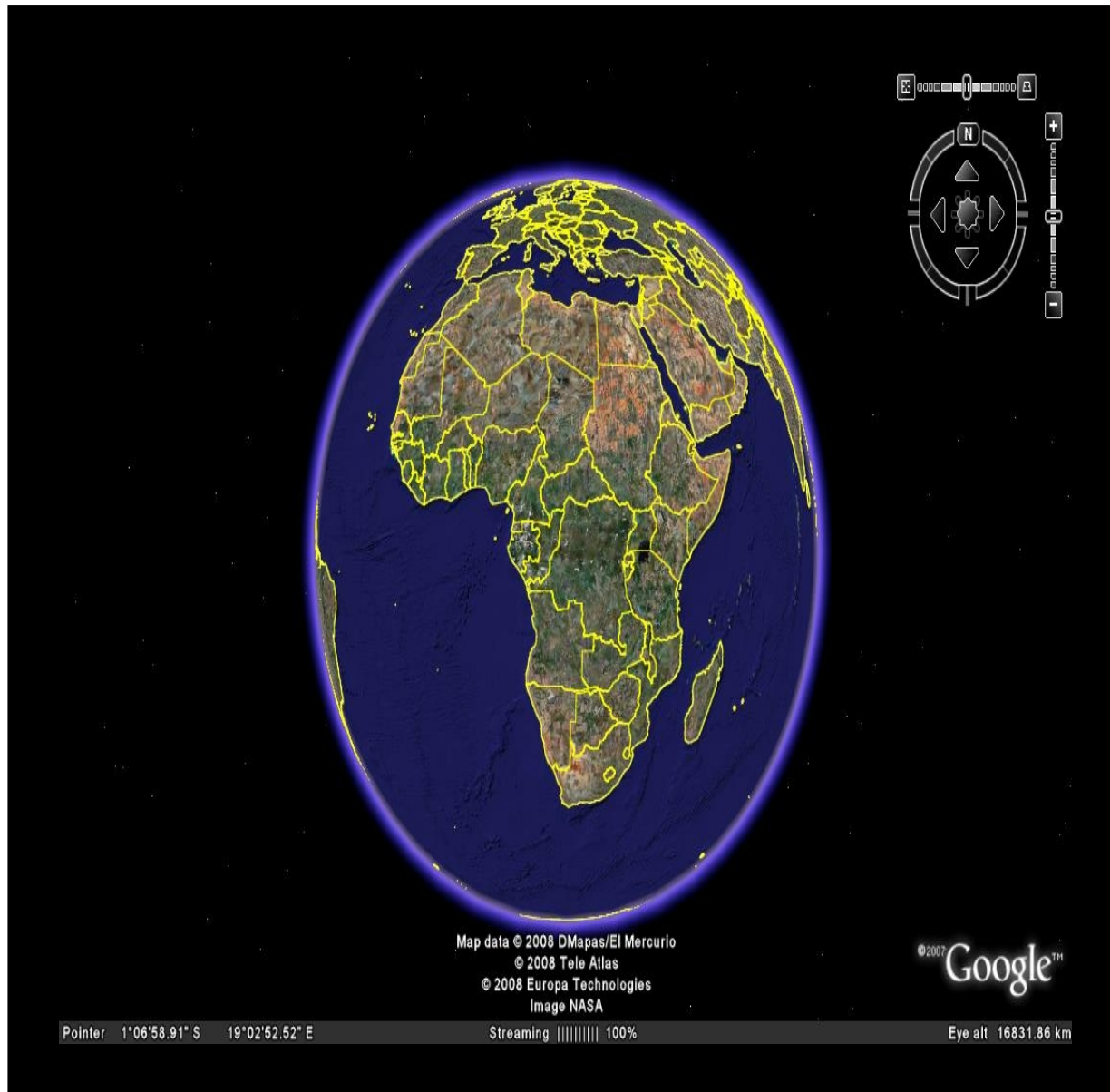


# Harness a Productive Cyber-ecosystem





# Patron to Partner





# Blue Gene for Africa

The Blue Gene/P cluster consists of 1024 compute nodes plus 16 IO nodes, which provide an approximately 11.5 Teraflops/s computational power. Each node is equipped with four IBM PowerPC cores plus three cache, 2GB memory and 13.6 GFlop/s peak performance.



# African Partnership

## Capacity Building

Joint training partnership

Sharing learning material

## Enhance Research Output through Cyberinfrastructure

Free computational resource / software for academic research

Data repositories / mirror sites

The way forward??? Suggestions????

Thank you

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