

Ecological Footprints:
some concerns about the theory,
methods and application

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Aims

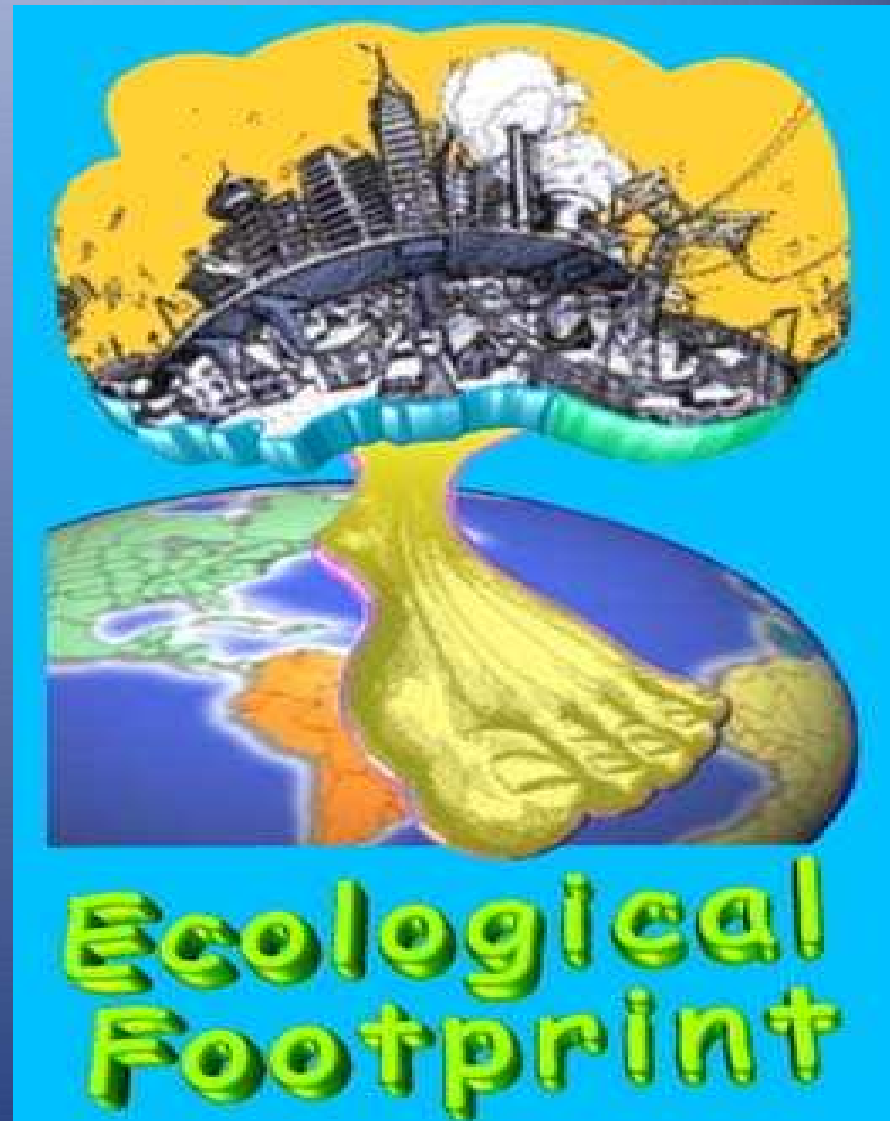
- Objections in principle
- Objections to methods
- Objections to the politics of (mis) representation

Sustainable development

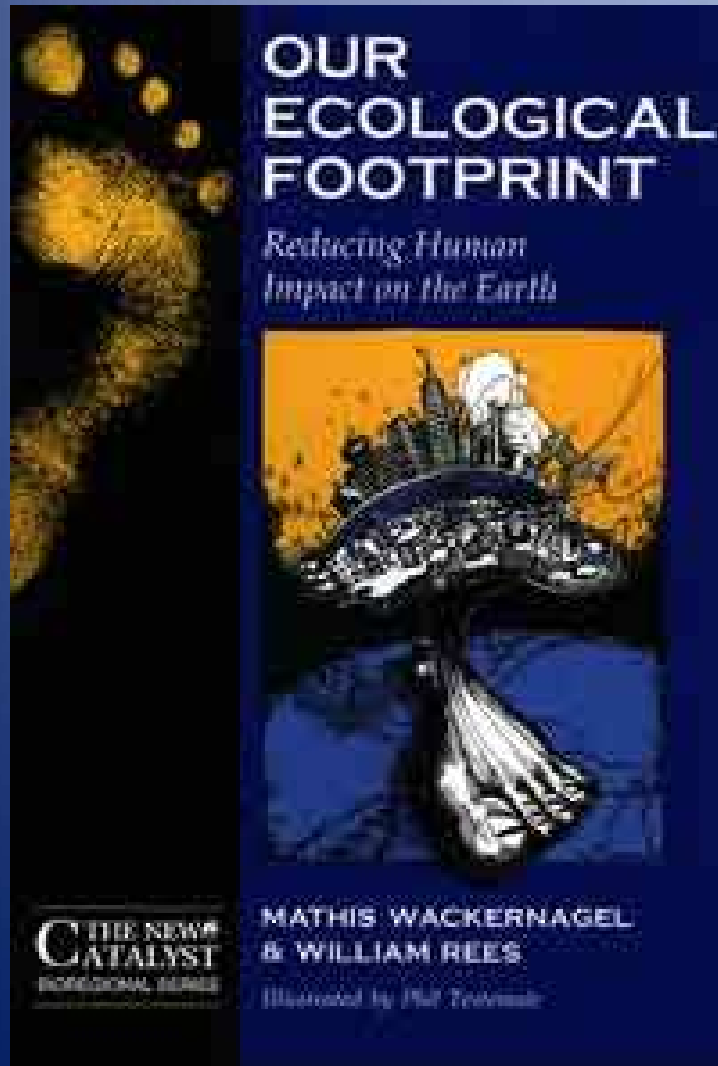
- sustainable development is ultimately about changing behaviour patterns, in particular bearing responsibilities for our actions, not transferring costs
- cost transference occurs where we consciously or inadvertently, transfer the environmental costs of our behaviour on to other: people, species, areas, sectors....

Ecological footprints

- Wackernagel and Rees
- Attempts to calculate how much land is required to support cities in particular consumption habits
- For: useful reminder of hinterland impacts, helps indicate scale of interdependencies between places



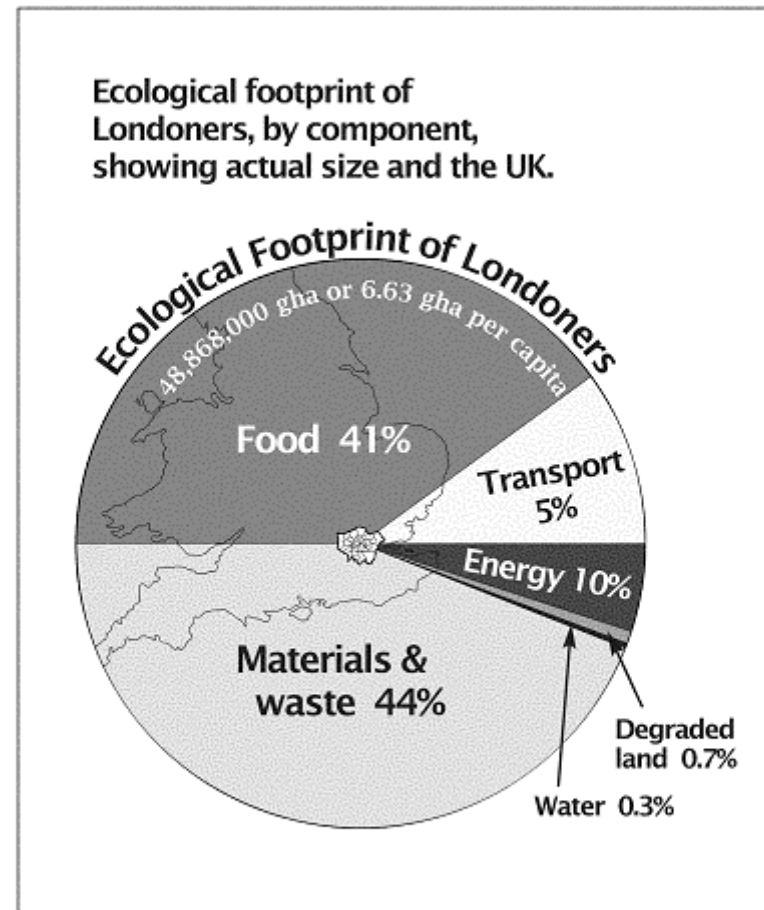
Ecological footprints - yes, but...



- But, it fails to account for
 - geography of impact
 - reverse benefits - +’ves of city in terms of invention – benefits to ‘donor’ areas
 - local tolerances and sustainable management practices
 - local social relations, esp. cost transference within cities
- Reification of the ‘local’ and of small is beautiful, rather than complex realities of how we live our lives, make choices, value our freedoms

Politics of representation

- The ecological footprint is a partial measure, a blunt tool that is used to justify very broad-ranging agendas to change behaviour
- these often seem to be about existing political priorities – ie not the outcomes of ‘science’

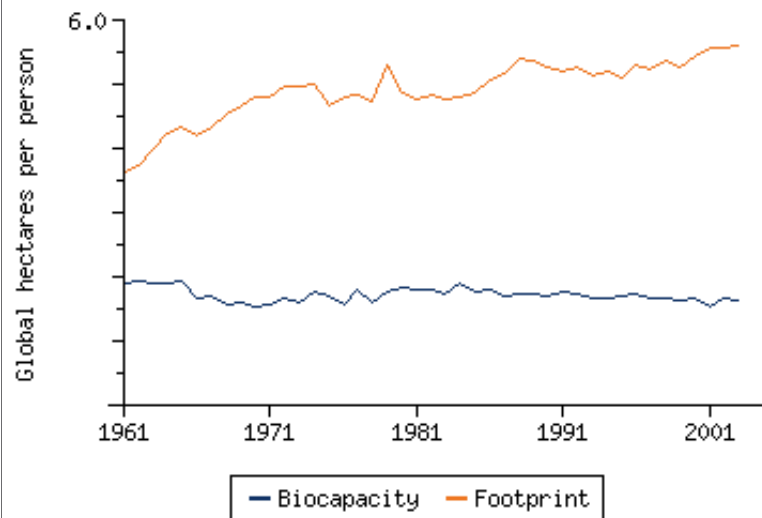


Graphic taken from *City Limits* Executive Summary (page VI)

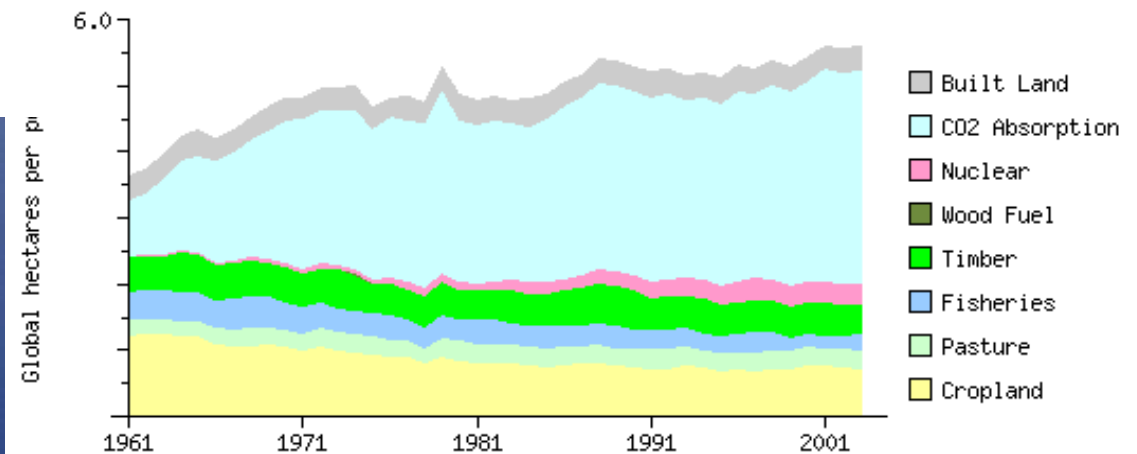
UK's eco footprint, 1961-2001

<http://www.footprintnetwork.org/>

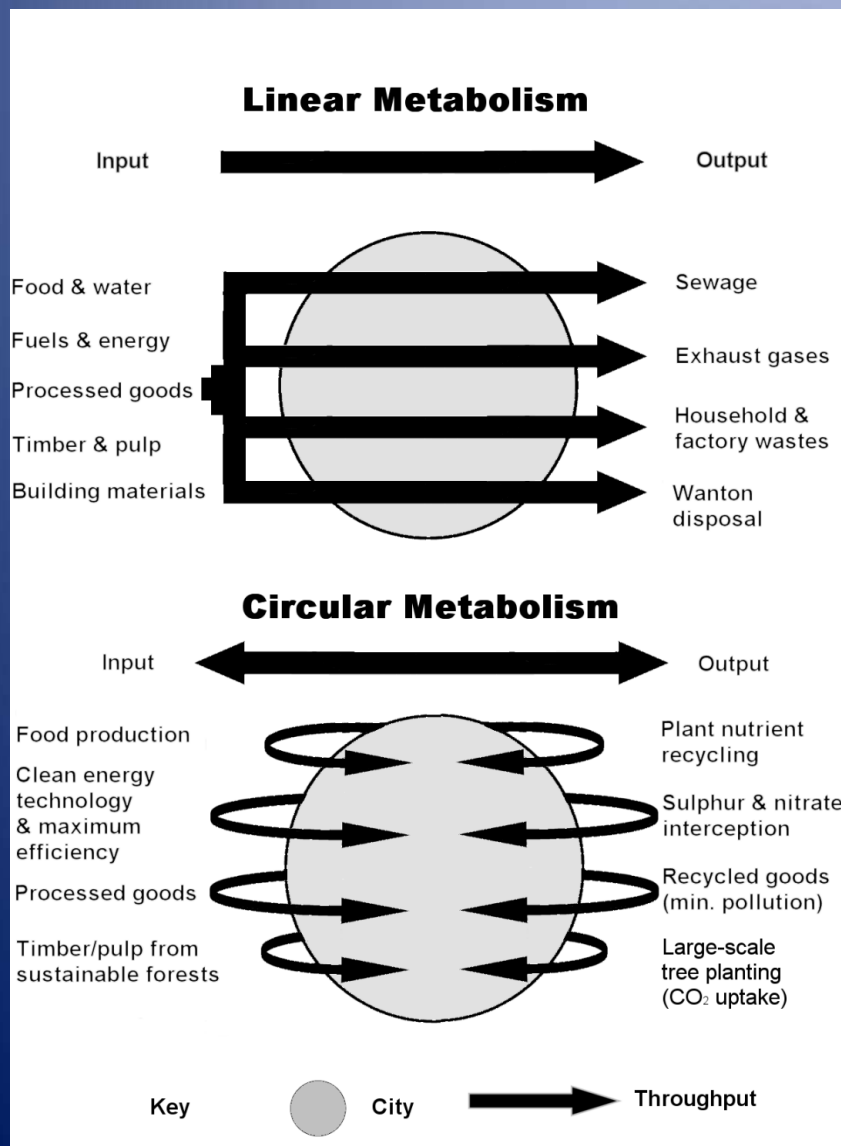
Footprint and Biocapacity



Footprint by Component

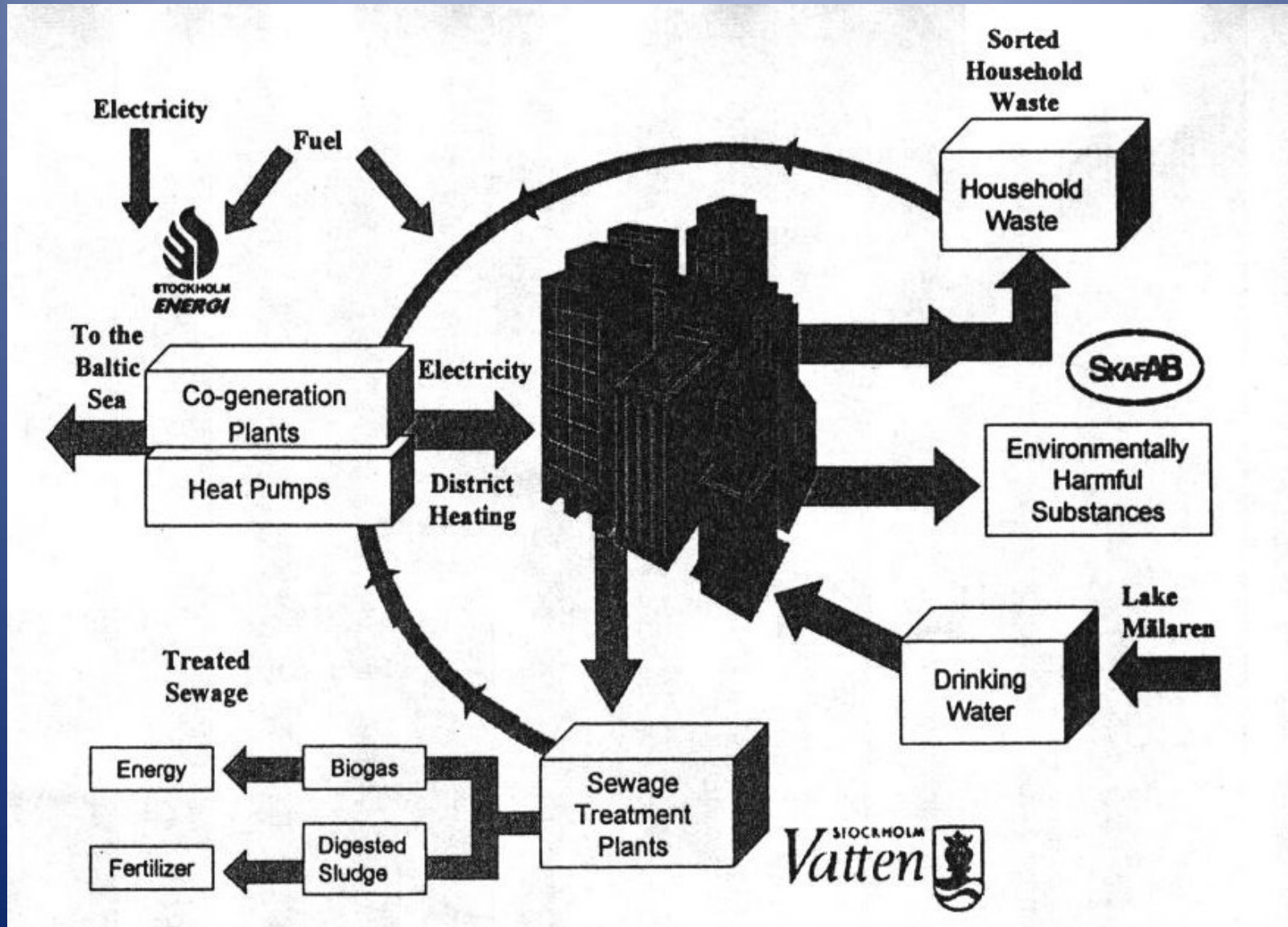


Linear and circular metabolism

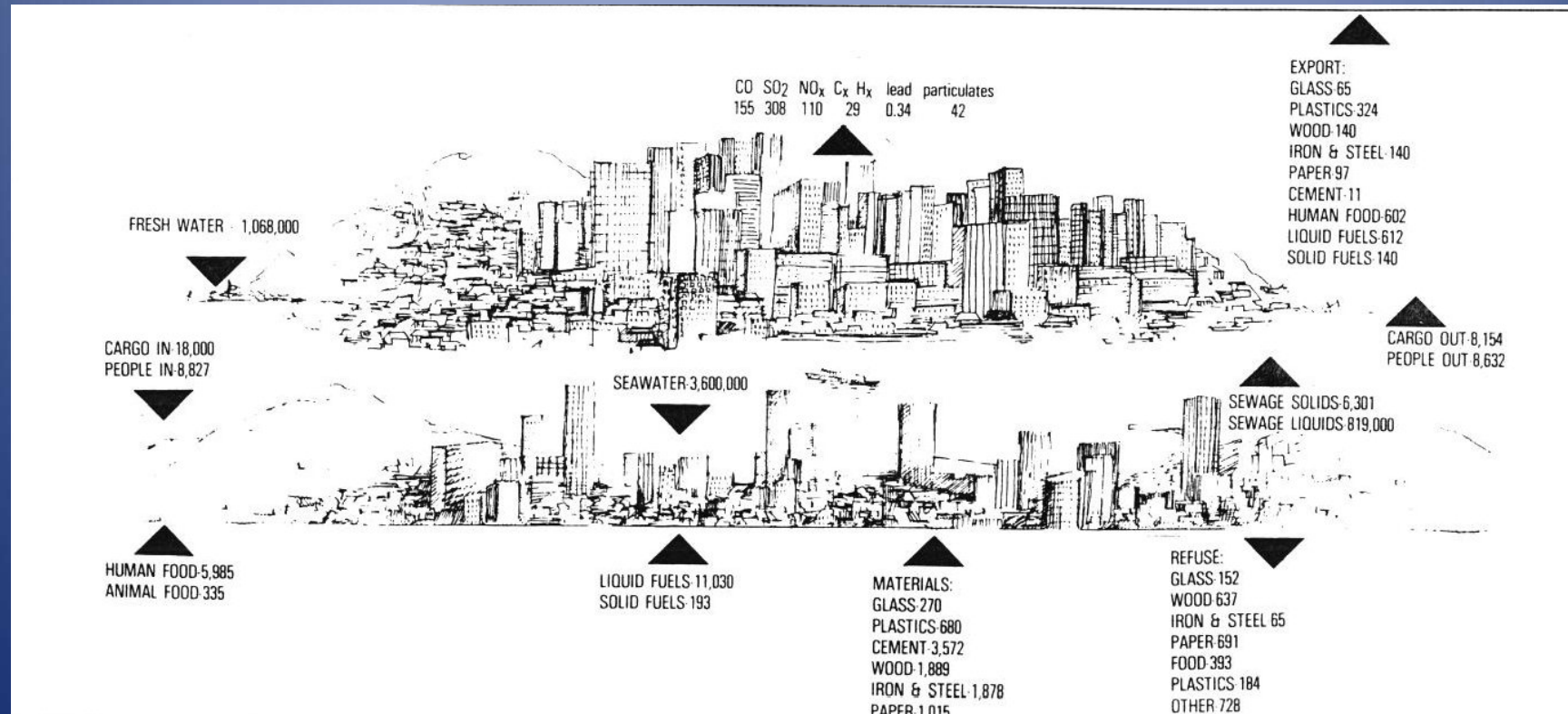


- *Linear metabolism* - inputs not linked to outputs, encouraging us not to think of where our resources come from and where our wastes go
- This is contrasted with circular metabolism
 - inputs and outputs are linked, encouraging cautious use of resources, recycling...
- Critique - its all a bit too neat. We do think about these things, but other forces send other signals to us

Closing Loops through Ecocycling in Stockholm, Sweden (Beatley 2000)



Urban metabolism of Hong Kong 1981



Conclusions

- Useful educational device
- There is a powerful hidden ideological agenda which distorts the tool from the outset – it is essentially one-sided implying cities ‘problems’
- Limited measurement tool that is too often over-extended by those who have commissioned the studies
- There may well be better ways of measuring urban impacts

References

- McManus P and Haughton G (2006) Planning with ecological footprints: a sympathetic critique of theory and practice, *Environment and Urbanization*, 18 (1), 113-127.
- Haughton G (2007) 'In pursuit of the sustainable city' in Marcotullio P and McGranahan G (eds) *Scaling Urban Environmental Challenges: from local to global and back*, Earthscan, London, pp.274-290