

Triple Bottom Line: Its Relevance to the Construction Industry

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Purpose of the Paper

- Appreciation of TBL and its implications to current and future undertakings of the construction industry.
- Reinforcement of the CRC's acknowledgement of TBL as a necessary process [vision statement]
- Advancement of the CRC's articulation of TBL as a component of planning, construction and post-construction phases.

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Scope of Paper

- Alternative perspective of TBL
- The 'Black Box' assessment based on current CRC projects
- Getting research partners to value TBL principles and to assist the integration of TBL into CRC research projects

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Alternative Perspective

- Current communal values governed by social environmental concerns such as climate change, water use and well being
- Future communal values will impact on the future value of buildings and construction methods

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Triple Bottom Line Assessment

Triple Bottom Line Assessment* is a burgeoning set of functions / procedures capable of comparative and sensitivity analysis of a trimorphism of:

- Social 
- Economic 
- Environmental 

values for all activities impacting on the environment, the community and the economic viability of a construction project.

* or any of its preceding names over the last 50years

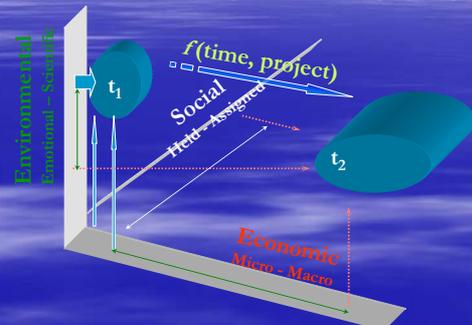
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Triple Bottom Line

f (interaction, consideration, politicisation, equity), equality



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Current Progress

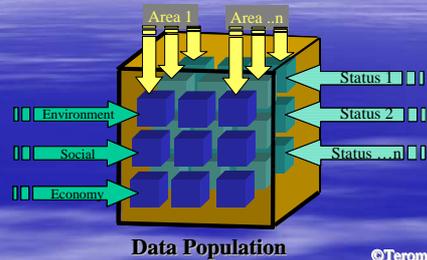
Over the last two years the Triple Bottom Line Research Initiative, UWS, has been developing a TBL estimation model that encompasses 1½ decades of research.

Stage 1 comprises research into the availability of raw data sources.

Stage 2 utilizes the algorithms developed by HertRank and EVALUATE computer modelling systems.

Stages 1 and 2 have also initiated research into methods of deriving alternative data, including the innovation and development of the 'eco-currency' concept.

The 'TBL Black Box'



A holistic multi-dimensional structure undertaken by sophisticated computer processing to provide TBL inter-temporal and multi-resource analysis.

Multi-Environmental Impacts



Modern construction impacts on multiple environments, e.g. water that is drawn from one location, used in another, and disposed of in yet a third ecosystem.

Construction TBL assessments address these types of issues

TBL & Risk

TBL provides the basis for technology to permit new construction methods based on informed risk assessment, rather than their **prevention due to current legislation.**

Conclusion

- This research is an extension of value assessment techniques developed over 20 years using TBL techniques for both built and natural environments.
- In each instance this research has been part of higher degree programs.
- The purpose of this research is to facilitate a standard for the planning, construction and post construction phases using consistent evaluation assessments, incorporating the scientific elements of measurement, replication and prediction.

Contact

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