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ABSTRACT

Title of abstract:	Structural Entropy
Author's Name and job title:	Damian Murphy Associate for CONNELL WAGNER
Co – author names, job title and organisation:	
Abstract:	The Use of a building willl ultimately determine it's sustainability. The nature of the structure and it's relevance to the site and the building effect the longevity of the building as an entity with the community. Whilst the type of material chosen has an effect on the carbon demand of the building the difference between construction methods will have a larger impact. Some studies show that the emissions difference between Concrete framed or Steel framed buildings is only marginal. Therefore the size of the carbon footprint will be greatly effected by the choice to build versus the re-use or adaptation of the existing building The façade of the building and the services are renovated on a more regular basis somewhere around 20 years, these upgrades result in the original structure costs constituting less than 10% of the total life cycle cost of the building. Design to extend the use of a building. If a structure is robust and detailed with adaptability in mind then the building can re-invent itself and be maintained for continued use. Re-use, Adapt, Re-cycle, can the form be modified to suit the new function?. Avoid Deconstruction. The demolition of a building should be considered within the overall carbon emission framework - if buildings can be heritage listed then they can also be carbon listed, such that demolition needs to be rigorously studied prior to approval for new construction, especially of green star buildings in the future.