CUNDALL

Workshop Outcomes

Cundall Melbourne – 20th September 2012

Cundall Sydney – 21st September 2012

Green Ratings – what's the point?

For World Green Building week 2012 Cundall held two workshops in Melbourne and Sydney to ask over 100 people the question – **Green Ratings – what's the point?**

With concern that the current negativity in the industry about green rating systems is overshadowing the positive benefits that rating systems can create, we ran a workshop to open up peoples thinking about the positive changes that green ratings systems have created and what they could create in the future. Participants were from a wide range of stakeholders in the construction industry including developers, contractors, architects, suppliers, engineers, ESD consultants and project managers.

The scene was set with a snapshot of the evolution of green buildings in Australia, from the early days of the green Olympics to the mandatory disclosure of energy performance driving the regeneration of the existing building stock.

Using Cundall's Cool Wall facilitation process, we asked the participants to vote for what they thought the top 5 changes that green rating systems had created over the last 10 years - 10 years being the time frame that some of the key green rating systems have been in operation mainly Green Star and NABERS.

Once everyone had chosen their top 5, we asked the participants to then consider what changes they would like green rating systems to create over the next 10 years - asking them to be aspirational, forward thinking and ready for change.
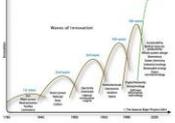
After we had collated the top 10, as a group we prioritised the changes with a focus on what would be most significant against what would be least significant.

What changes have rating systems created in the last 10 years?

The first question was "what changes have green rating systems created over the last 10 years?"

The results for the Melbourne workshop and the Sydney workshop are shown below - the Sydney results are the combination of the two voting walls. We have also combined the votes from both Melbourne and Sydney for comparison.

CUNDALL

What changes have rating systems created in the last 10 years?

	Melbourne	Sydney	Combined Votes	
1	**Indoor Environmental Quality** Rating systems increase the indoor environmental quality of all our buildings	**Occupant Expectations** Rating systems change user expectations of the built environment for the better – bike spaces, recycling, green spaces	**Occupant Expectations** Rating systems change user expectations of the built environment for the better – bike spaces, recycling, green spaces	15%
2	**Occupant Expectations** Rating systems change user expectations of the built environment for the better – bike spaces, recycling, green spaces	**Materials and Products** MATERIAL SMACKDOWN! what is green furniture made from? Rating systems drive reduced environmental impact of materials, products and services	**Materials and Products** MATERIAL SMACKDOWN! what is green furniture made from? Rating systems drive reduced environmental impact of materials, products and services	14%
3	**Building Value** Rating systems create a mechanism to measure, monitor and report greenness for building valuations	**Indoor Environmental Quality** Rating systems increase the indoor environmental quality of all our buildings	**Indoor Environmental Quality** Rating systems increase the indoor environmental quality of all our buildings	12%
4	**Materials and Products** MATERIAL SMACKDOWN! what is green furniture made from? Rating systems drive reduced environmental impact of materials, products and services	**Green Jobs** Rating systems drive the creation of green jobs throughout the construction, engineering and property industry	**Innovation** Rating systems drive innovation in the development of the built environment	10%
5	**Innovation** Rating systems drive innovation in the development of the built environment	**Innovation** Rating systems drive innovation in the development of the built environment	**Building Value** Rating systems create a mechanism to measure, monitor and report greenness for building valuations	9%

The top 5 changes received some 60% of the votes, showing that there is a level of consistency in what participants saw that rating systems have changed over the last 10 years.

The most consistent in the votes was an increase in the expectations of the occupants of buildings, in particular office buildings where there are now greater expectations of what to expect in a building such as bike spaces, recycling areas, daylight and views.
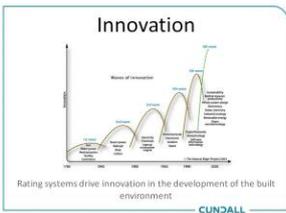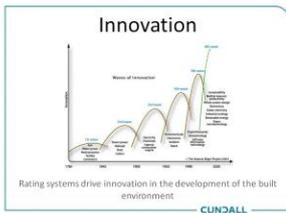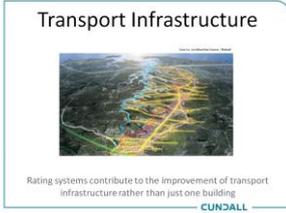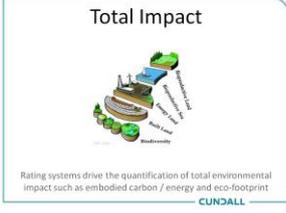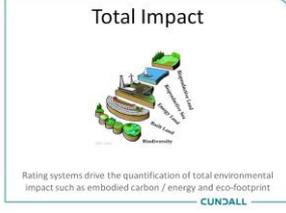
The second most voted change was that green rating systems had created a reduced impact of materials, products and services. This was of particular note for Green Star where the certification of a product with green credentials is necessary.

The third most popular change was that green rating systems had increased the indoor environmental quality of our buildings, not just through daylight and fresh air but also through the selection of products that off gas less VOCs.

What changes do you want rating systems to create in the next 10 years?

The second stage of the workshop was to ask the participants to vote which top 5 changes they want green rating systems to create over the next 10 years, this step was purposefully aspirational and designed to get the participants to think beyond the today and into tomorrow.

The table below shows the ranking based on voting on the left and the ranking after prioritising the changes by significance for Melbourne.
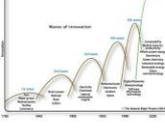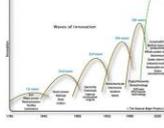
Melbourne			
	Voted Ranking	Votes	After Prioritising
1	Innovation — Rating systems drive innovation in the development of the built environment	11%	Innovation — Rating systems drive innovation in the development of the built environment
1	Future Proofed Buildings — Rating systems create buildings that are future proofed against climate change, resource scarcity and social changes	11%	Transport Infrastructure — Rating systems contribute to the improvement of transport infrastructure rather than just one building
3	Total Impact — Rating systems drive the quantification of total environmental impact such as embodied carbon / energy and eco-footprint	9%	Total Impact — Rating systems drive the quantification of total environmental impact such as embodied carbon / energy and eco-footprint
4	Regulation Replaces Ratings — Rating systems create change in legislation such that minimum compliance out performs green ratings	7%	Regulation Replaces Ratings — Rating systems create change in legislation such that minimum compliance out performs green ratings
4	Social Cohesion — Rating systems create improved social cohesion through a focus on community, amenity and productivity	7%	Social Cohesion — Rating systems create improved social cohesion through a focus on community, amenity and productivity
4	Individual Responsibility — Rating systems drive individual awareness to a level where individual responsibility within society takes over	7%	Individual Responsibility — Rating systems drive individual awareness to a level where individual responsibility within society takes over

The prioritising of the changes did not significantly alter the ranking, however it is important to note that Transport Infrastructure moved from ranking eight under the votes to second on prioritising. The conversation of public transport is a topical subject at the moment and a lot of the conversation was around how green rating systems can create change in the area of public transport. It was generally noted that connectivity of communities, accessibility and resilience against gridlock were key "external" issues that need to be picked and driven by rating systems, just as much as bicycle parking is at present.

It is also interesting to note that Future Proofed Buildings went from joint 1st place in the voting to 7th place after prioritising - it was felt that if the other changes were prioritised then our buildings would inherently be future proofed. There was also considerable debate on exactly how a rating system could capture Future Proofing and design for adaptation, or if other drivers would be better placed to deliver it. A post workshop note the GBCA state that Future Proofing is stated as one of the benefits of Green Star although this didn't appear in the voted changes of the last 10 years and ranked low for the next 10 years.

Innovation was voted at the top and stayed at the top after prioritising. It was considered one of issues best driven by ratings tool over the last 10 years and strongly supported as something that to continue into the next 10. It was considered a fundamental requirement of the continuing drive to a greener built environment and also fed into the most passionate debate of the day on the topic of "Regulation vs Innovation" (around the Regulation Replaces Ratings topic). There were strong opinions about the role of regulation in driving change from the bottom up, versus the need for industry to have the freedom and incentive to innovate its way to better performance. Examples ranged from protection of human health by bans on tobacco advertising to the innovations currently underway to improve existing buildings, stimulated by government funding initiatives (rather than regulation). Ultimately, it was agreed that both were needed to simultaneously pull the best of the market forward while closing out the worst performers with regulation – its middle ranking reflects the diversity of opinion on its role in rating systems.

The table below shows the ranking based on voting on the left and the ranking after prioritising the changes by significance for Sydney.

	Sydney		
	Voted Ranking	**Votes**	**After Prioritising**
1	Utility Infrastructure Rating systems contribute to the improvement of the utility infrastructure rather than just one building	11%	Total Impact Rating systems drive the quantification of total environmental impact such as embodied carbon / energy and eco-footprint
2	Innovation Rating systems drive innovation in the development of the built environment	11%	Innovation Rating systems drive innovation in the development of the built environment
2	Collaborative Consumption Rating systems drive collaboration consumption and sharing of resources across building boundaries	11%	Collaborative Consumption Rating systems drive collaboration consumption and sharing of resources across building boundaries
4	Transport Infrastructure Rating systems contribute to the improvement of transport infrastructure rather than just one building	9%	Social Cohesion Rating systems create improved social cohesion through a focus on community, amenity and productivity
5	Social Cohesion Rating systems create improved social cohesion through a focus on community, amenity and productivity	8%	Regulation Replaces Ratings Rating systems create change in legislation such that minimum compliance out performs green ratings

The most significant change from voted ranking to prioritising was the movement of Total Environmental Impact from 6th place in voting to 1st place after prioritising. The discussion centred around how the ability to measure and quantify total environmental impact would drive significant change within the property industry. The prioritising of Total Environmental Impact swopped places with Innovation several times where there was some heated discussion about whether Innovation would drive the measurement of Total Environmental Impact or whether the measurement of Total Environmental Impact would drive Innovation.

Another significant change was the movement of Utility Infrastructure which received the most votes to 7th after prioritising and Transport Infrastructure which moved from 4th to 8th after prioritising. The discussion around this revolved around the significance of the changes - it was felt that if infrastructure was prioritised we wouldn't see changes in other areas however if Innovation and Total Environmental Impact were prioritised then these would drive changes in our infrastructure.

It is also worth noting that social influences were prioritised over some of the more hardware options such as infrastructure and design. The discussions around Social Cohesion saw it move from being placed high on significance because if we could prioritise Social Cohesion we would drive collaborative consumption and innovation, to it being voted lower in significance with design and measurement being preferred drivers of change.

The final note would be on Regulation Replaces Rating. A lot of discussion was held about how regulation can drive innovation, the fact that Green Star is seen as quasi regulation (minimum compliance) and that the whole industry needs to change. It was felt that this change could be quite significant for the majority of the industry rather than just the leaders and innovators.

Comparison of last 10 years to the next 10 years

One of the most significant comparisons to make is the difference between the highest voted from the changes over the last 10 years to the highest voted changes over the next 10 years.
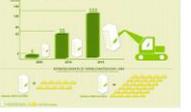
In comparing the ranking of the changes in the last 10 years to the next 10 years the greatest contrasts are Occupant Expectations which went from 1st place to 20th place and Indoor Environmental Quality which went from 3rd to last place. To a certain degree this represents a maturity of the industry and a representation of the significant changes that green rating systems have had in these two areas. It also highlights a possibility that green rating systems, and maybe even our design professionals, don't need to focus on improving these beyond what changes and best practice standards have been created already. An interesting note based on the recent media coverage around IEQ and green buildings.

The last difference to note from the last 10 years is that Building Value was voted lower in the list for the next 10 years (15th) compared to 5th for the last 10 years. This gives some indication that the participants are viewing the need for justification of increased building value as a lower priority over the next 10 years, possibly due to the recent data indicating that buildings with green ratings have an increased value over those that don't.

The top voted changes for the next 10 years compared to the last 10 years also draws some interesting conclusions.

It can be seen from the voting that green rating systems do not appear to have had significant impact on our infrastructure (outside of individual buildings) lasting the past 10 years but that the participants indicated that they want green rating systems to have an impact outside of the individual buildings in to our wider infrastructure. Although the hardware changes were prioritised less through discussion it is worth noting that there is a desire for rating systems to influence our infrastructure beyond buildings.

As a final comparison the voting for the software side of things (social) indicates that green rating systems be their focus on design over the last 10 years have not had a significant impact on Social Cohesion and the like, but that the participants wanted a greater focus on Social Cohesion and Collaborative Consumption over the next 10 years. Green Star Communities may go some way to addressing this but by its nature it will be top down driven and not driven by the real community.

CUNDALL

Past 10 years Ranking		Next 10 years Ranking		Future 10 years Ranking		Last 10 years Ranking
1	Occupant Expectations Rating systems change user expectations of the built environment for the better – bike spaces, recycling, green spaces	20	1	Innovation Rating systems drive innovation in the development of the built environment	4	
2	Materials and Products Rating systems drive reduced environmental impact of materials, products and services	9	2	Utility Infrastructure Rating systems contribute to the improvement of the utility infrastructure rather than just one building	18	
3	Indoor Environmental Quality Rating systems increase the indoor environmental quality of all our buildings	24	=3	Transport Infrastructure Rating systems contribute to the improvement of transport infrastructure rather than just one building	24	
4	Innovation Rating systems drive innovation in the development of the built environment	1	=3	Future Proofed Buildings Rating systems create buildings that are future proofed against climate change, resource scarcity and social changes	13	
5	Building Value Rating systems create a mechanism to measure, monitor and report greenness for building valuations	15	=3	Social Cohesion Rating systems create improved social cohesion through a focus on community, amenity and productivity	22	
6	Green Jobs Rating systems drive the creation of green jobs throughout the construction, engineering and property industry	12	=6	Total Impact Rating systems drive the quantification of total environmental impact such as embodied carbon / energy and eco-footprint	12	
			=6	Collaborative Consumption Rating systems drive collaboration consumption and sharing of resources across building boundaries	18	

CUNDALL

Companies Represented

- Allen Jack + Cottier Architects
- APP Corporation Pty Ltd
- Architects Fulton+Salomon
- Australand
- Barangaroo Delivery Authority
- Billard Leece Partnership
- Bokor Pty Ltd
- Brookfield Multiplex
- BuildCorp
- City of Melbourne
- Club Innovations
- Coustic-Glo
- Cox Richardson
- Cundall
- ddk
- Earth Check
- Energy Raters
- Grocon
- HBO+EMTB
- Impact Project Management
- Inhabit Group
- Institute of Sustainable Futures

- Kann Finch Group
- Knight Frank
- Laing O'Rourke
- Lend Lease
- Lipman
- Macdonell Williams
- NBRS + Partners
- Paragon Project Management
- PhD student at Macquarie University
- Probuild Constructions
- PTW Architects
- Rice Daubney
- Ronstan Tensile Architecture
- Stockland
- Students from Melbourne University
- Suters Architects
- Valad Property Group
- Watpac Developments
- Whitefield Mcqueen
- Woodhead