

EmAGN Q&A with Dr Rosemary Kennedy FRAIA

Banning the Glass Skyscraper.

24th September 2019

1. Tell us a little bit about who you are and your ethos in regards to sustainability in the built environment?

RK: I am director of the design research consultancy SubTropical Cities. Throughout my career as an architect, academic and teacher, the question that has consistently underpinned my interests and actions is “how can architecture and urban design contribute to environmental and social sustainability most effectively?” Place-based design that responds to climate and landscape and local lifestyle preferences is the lens through which I view and constantly attempt to answer this question.

2. What do you believe the pro's/con's/alternatives are to glass skyscrapers?

RK: Many developers of tall buildings focus on views as their selling point and architects oblige with walls of glass that they describe as ‘airy’. Towers with glazed facades are not designed to admit air, and often have no cross ventilation. Glare and heat gain or heat loss come along with views and daylight supplied by glass walls. Even if glazing is low-e, or high performance, the shading coefficient is not enough to replace the shade performance that well-designed physical barriers provide. Ironically, residents of glazed apartment towers find they need blinds for thermal comfort during the day and privacy at night. The view is less important day-to-day.

3. Is banning the glass skyscraper the solution to all our problems?

RK: No, the high-rise building industry has already begun a shift away from a generation of all-glass facades and is placing more value on place-specific solutions with more overt external shading, and more actual ‘wall’ than glass. But buildings can only do so much, and should not have to do everything. We need to take a good hard look at what’s happening outside buildings that is stopping us from opening the windows. For example, when we rethink how we move in our cities, we can reduce noise and air pollution, and give people more choice to naturally-ventilate the buildings they occupy.

4. Thinking about the idea of subtropical architecture in Queensland specifically, what, if anything, can we learn from the domestic vernacular of ‘The Queenslander’ when translating it to the civic scale?

RK: In a cooling-dominant climate like ours, the Queenslander house’s natural ventilation strategy is instructive. Urban form that supports low-carbon buildings in the subtropics can be seen in much the same way as an individual climate-responsive building - cooling the air and letting it through, letting daylight in, keeping summer heat out and facing the winter sun.

5. What do you think about the government's legislative response to climate change or energy efficiency? Do you think that the NCC deemed-to-satisfy energy efficiency requirements are good enough?

RK: Stronger policies, improvements in minimum standards, and mandatory requirements and incentives to eliminate carbon emissions are needed urgently to meet Paris Climate Agreement benchmarks.

6. What can we as professionals in the built environment do to combat climate change?

RK: One way forward is to support and promote ASBEC's call for a mandatory zero-carbon-ready building code, using the ready-made NCC as the vehicle. See *Built to Perform: An Industry-led Pathway to a Zero Carbon Ready Building Code* www.asbec.asn.au. The NCC's performance standards do not preclude the use of fundamental principles of passive climatic design for energy efficient Class 2 buildings. Only the Code's performance standards are mandatory, yet many developers and architects take the non-mandatory 'acceptable solutions' as their starting and end point.

7. What do you believe the future of glass skyscrapers will be?

I don't think the tall glass building has a future.