

Beacons of our Future

By **Richard Buckingham**
Head of Sustainability



Changes to our climate and dwindling finite natural resources are increasingly playing a role in shaping our buildings. The approach of the previous 70 years or so of designing buildings and urban systems which use large amounts of cheap, seemingly inexhaustible fossil fuel energy is outdated and discredited. We are drawing down on our environmental capital and risk arriving at a situation where the capital can no longer recycle itself. Like the lottery winner who spends, spends, spends or the early inhabitants of Easter Island who squandered their environmental resources to an supportable degree; arguably we are already in overdraft.

Public policy continues to evolve, increasing the emphasis on resource efficiency, carbon emissions reductions (80% on 1990 levels by 2050) and sustainable outcomes. Indeed, within the next decade it is likely that most new buildings will be designed to zero carbon standards utilising energy efficient solutions and renewable energy generation at micro and macro levels.

However, in delivering a sustainable future designing buildings to zero carbon standards is unlikely to be enough. Fundamental changes in the way we travel, use water, produce food, create environments and manage our waste will also be necessary. Technology will play a role in the delivery of these solutions but our behaviour, collectively and as individuals, will be of critical importance.

Our buildings are a physical response to, and driver for, our behavioural patterns and are therefore fundamental to the delivery of a sustainable future. Buildings can be the catalyst for change; sustainable buildings can facilitate and drive sustainable lifestyles, enhancing our relationship with our environment and each other.

Buildings reflect the thinking of society at a given point in time—they offer a window into our values, personalities and hopes for the future. Designing and delivering sustainable buildings affords us the opportunity to physically manifest sustainable outcomes—to create beacons for our future.

The sustainability agenda should be embraced for the opportunities it affords in environmental protection, social wellbeing, value and economic growth. Historically, sustainability has too readily been considered as an additional cost and as a barrier to development rather than as an opportunity. Too many of our existing buildings create unhealthy, impersonal and uninspiring environments with no link to nature and an approach to functionality and occupant behaviour at odds with sustainable outcomes. Appropriately addressing sustainability affords us the opportunity to redress this balance and create better outcomes.

In order to best deliver these beacons for our future a shift in thinking is required. Protection of the environment, and by implication resource efficiency, should be foremost in the minds of designers. The environment sustains us and our society and we cannot hope to deliver a sustainable future without due regard to its protection and maintenance. Economic thinking must shift to appropriately account for environmental constraints.

Buildings are the critical interface between a variety of sustainability issues—energy use, transport, water use, waste production, biodiversity, health, social interaction and integration and material use to name a few. Therefore, buildings afford us the opportunity to facilitate low carbon lifestyles in a holistic manner. This requires design professionals to operate in integrated teams—the BDP approach will become even more applicable as we move forward.

New buildings, in and of themselves, will become more resource efficient. However, most of the buildings currently in existence will still be with us in a low carbon future. Therefore, new buildings must facilitate sustainable lifestyles not just for their occupants but also for the adjacent community. The role of new buildings is crucial and clear; they must be the catalysts for change, facilitating and inspiring our sustainable future—truly Beacons for our Future.