

Stranded property assets¹

Industry insights

John Sheehan

Faculty of Society and Design, Bond University, Gold Coast, Queensland (Australia); Institute for Economic and Environmental Policy (IEEP), Faculty of Social and Economic Studies, Jan Evangelista Purkyně University in Usti nad Labem (Czech Republic).

Ken Rayner

Faculty of Business and Law, Curtin University, Perth, Western Australia (Australia).

Abstract

The concept of “stranded assets” has emerged primarily within climate change and financial risk literature to describe assets that suffer premature devaluation due to environmental transition, regulatory reform, or shifts in market expectations. Originating in analyses of fossil fuel reserves and carbon-intensive infrastructure, the concept has since been extended to encompass broader environmental and systemic financial risks. Yet, despite its growing prominence in environmental economics and financial stability discourse, the idea of stranding has received little sustained attention within property law or property valuation theory and practice. This omission is striking. Property assets are uniquely exposed to regulatory change, temporal lag, and institutional evolution, and thus provide a particularly fertile site for examining how and why assets become stranded.

Key words: Stranded assets; property law; valuation theory; regulatory change; economic obsolescence

Introduction

This paper advances a property law and valuation theory intervention. It argues that the phenomenon of stranded property assets reveals the structural contingency of modern property entitlements. In liberal property regimes, property is often conceptualised—both doctrinally and within valuation practice—as a relatively stable bundle of rights capable of supporting predictable income streams over time. Planning permissions, zoning classifications, development approvals, and assumed highest and best use are routinely treated as durable foundations for economic assessment. However, the operation of planning systems, environmental regulation, infrastructure transition, and shifting market conditions demonstrates that these entitlements are temporally conditioned and politically mediated.

¹ The Western Australian planning legislation described is provided merely as an exemplar of the Australian legal milieu.

Regulatory change does not merely adjust property rights; it can materially curtail their economic life without formal expropriation or compensable taking.

The paper contends that stranding in the property context arises not only from climate-driven physical impacts but also from what may be described as regulatory and temporal stranding: the impairment of asset value through evolving land-use controls, upgraded building standards, altered infrastructure regimes, or market dislocation occurring within the ordinary cascade of time. In such circumstances, the disconnect between an asset's physical life, legal life, and economic life becomes apparent. Valuation methodologies that assume continuity of use or stability of regulatory conditions are thereby exposed as embedding unacknowledged institutional risk.

By situating stranded property assets within the intersection of property law and valuation theory, this paper reframes stranding as neither exceptional nor aberrant, but as a structural feature of contemporary regulatory states. In doing so, it contributes to ongoing debates concerning the nature of property entitlements, the limits of regulatory security, and the adequacy of valuation practice in contexts of dynamic legal and economic change. The following section canvasses the broader concept of stranded assets.

Stranded assets

Stranded² assets have increasingly been the subject of research based primarily on the impact of climate change on physical assets, such as in situ fossil fuel reserves (such as coal deposits), which arguably are no longer viewed as commercially viable from the standpoint of the current sustainability-driven economic system. In 2013, Caldecott, with co-researchers from the University of Oxford, canvassed the impact of climate change on stranded agricultural assets (Caldecott, B., et al. 2013) which are no longer viewed as commercially viable³.

Subsequently, in 2021, with a more expansive brief, Caldecott, with four different co-researchers from the University of Oxford, canvassed "a much broader range of assets" (Caldecott et al., 2021, p.419) impacted by environmental change. Significantly, the later research revealed increasing climate-related risks to financial institutions, particularly insurers, and more broadly to society from a political economy perspective. (Caldecott, 2021,p.429).

In support, in 2024, Markey-Towler from Melbourne Climate Futures with the University of Melbourne observed that emerging climate law increasingly draws upon other "legal tools", including more traditional legal sub-disciplines such as property law (Markey-Towler,2024, p. 44).

² The word "stranded" is defined (in part) in the New Shorter Oxford English Dictionary as that which has been "abandoned in an isolated or inaccessible position".

³ At page 7. 'stranded assets are assets that have suffered from unanticipated or premature write-downs, devaluations, or conversion to liabilities'. The International Valuation Standards Committee under IVS103 would consider these assets to be economic obsolescent as defined under A30.16(c) "any loss of utility caused by economic or locational factors external to the asset."

The above discussions by Caldecott and Markey-Towler clearly edge the reader towards the issue of property assets that are stranded by climate change, but also by other impacts. Indeed, Caldecott tentatively identifies such broader non-climate induced impacts stating:

Stranded assets can be created deliberately through changes in regulation, but where such regulation is implemented and what form it takes are subject to political gaming. (Caldecott et al,2021,p.431)

In the next section of this paper, the focus necessarily turns to the issue of property assets stranded by the cascade of time rather than by climate-change impacts, notwithstanding that the impacts are markedly similar.

Stranded property assets

At the outset, this paper has recognised that Caldecott places the above discussion mostly within the aegis of climate change impacts. Yet dislocation in the value of property assets arising from changes in property-related regulations (such as altered land use zonings and upgraded building codes) is a similitude of those impacts attributed by Caldecott and Markey-Towler to climate change.

More recently, one such impact is the pandemic arising from COVID-19 in the period 2020-2023. During this phase, unsurprisingly, some properties with development approvals could have either been subject to partial (or limited) commencement of construction, or even complete delay. In the above scenario, a property owner/developer would have been responding to perceptions of market demand first observed in 2018-2019 or possibly even earlier.

Given that original design decisions could also have been made in the period 2018-2019 or probably earlier, any plans for which development approval had subsequently been obtained could likely be no longer feasible due to the fluidity of demand and the dynamics of the property market. In such a scenario, such property assets would now be classed as stranded assets like those climate change-driven stranded assets previously mentioned.

As Caldecott has correctly observed, changes to regulations are usually driven by changes which are “created deliberately” (Caldecott et al 2021, p.431). In the case of property regulations, such deliberate changes are almost wholly driven by altered land use zonings and/or necessarily upgraded building regulations, the latter generally responding to enhanced health or building codes. The owner of a stranded property asset in such circumstances would be facing a possible loss of value, whilst a financier, being the holder of a mortgage over such a property asset, could be similarly impacted.

These circumstances illustrate the broader proposition advanced in this paper: that property entitlements within modern planning systems are inherently contingent upon evolving institutional, regulatory, and market conditions, reflecting the long-recognised tension within planning law between private property rights and public regulatory objectives (McAuslan, 1980, p.2).

Indeed, the dynamics described above can be observed within the current Western Australian land use planning framework when coupled with the fluidity of demand and the dynamics of the property market. Both market transformation and regulatory change have materially

affected the economic worth of multifarious property assets. In the penultimate section of this paper, three Western Australian examples illustrate the mechanisms through which property assets may become stranded.

Examples from Western Australia

The dynamics described above indicate how evolving property markets and regulatory frameworks can explicitly impair property value and development potential, as the following three examples now chronicle.

Carillon City

A prominent built-form example is Carillon City, a retail complex located in the Perth CBD, developed in the late twentieth century as a major retail arcade and office complex. The property was designed to serve the (then) strong CBD retail market that characterised Perth's commercial core at the time of construction (Government of WA, 2024). Over subsequent decades, as observed by Wrigley and Lambiri (2015, p.14), structural changes in retailing—including the expansion of large suburban shopping centres, shifts in consumer behaviour, and the growth of online marketing—have reduced the viability of traditional CBD retail arcades (Dixon and Marston, 2005). Despite remaining structurally serviceable, much of the Carillon City complex has experienced prolonged vacancies, finally triggering redevelopment. Carillon City reveals a divergence between the physical life of a building and its economic life, a distinction recognised in valuation theory whereby an asset may remain physically serviceable while its capacity to generate economic returns has materially diminished. This demonstrates how structural shifts in market demand can render an otherwise functional property economically obsolete.

State Planning Policy 2.6 (Coastal Planning)

Regulatory planning frameworks provide additional examples of potential property stranding. One such mechanism arises through the application of coastal planning controls under Western Australia's State Planning Policy 2.6 (Coastal Planning) (WAPC, 2013). This policy requires planning authorities to incorporate projections of coastal erosion and sea-level rise into development assessment processes. As coastal hazard modelling has evolved, some parcels of land that were historically subdivided or zoned for residential development have become subject to increased setback requirements or development restrictions (Abel, N., Gorrard, R., Harman, B., et al, 2011). In such circumstances, land that was once considered suitable for residential development in coastal areas may no longer achieve its anticipated use, thereby becoming effectively stranded and resulting in a loss of value.

State Planning Policy 3.7 (Planning in Bushfire Prone Areas)

A further regulatory illustration arises through the implementation of State Planning Policy 3.7 (Planning in Bushfire Prone Areas) (WAPC, 2015). Introduced in response to increasing recognition of bushfire risk across parts of Western Australia, the policy requires development proposals in designated bushfire-prone areas to satisfy a range of technical risk-mitigation requirements, including bushfire attack level assessments, defensible space provisions, and specific construction standards. While these measures serve important public safety objectives, their application may significantly increase development costs or render

development impracticable on certain lots, particularly within rural-residential subdivisions created prior to the introduction of contemporary bushfire planning frameworks (Eriksen, & Gill, 2010).

Taken together, these examples demonstrate how both market transformation and regulatory evolution may undermine the economic viability of property assets. In each case the property interest remains legally intact, yet the anticipated economic use of the asset becomes constrained or unviable, thereby exposing the stability assumptions that often underpin conventional property valuation practice. These circumstances illustrate the broader proposition advanced in this paper: that property entitlements within modern planning systems are inherently contingent upon evolving institutional, regulatory, and market conditions.

In the final section of this paper, the focus necessarily turns briefly to the vexed issue of determining the worth of property assets stranded by the cascade of time rather than by climate-change impacts, notwithstanding that the impacts are markedly similar.

Assessing the worth of stranded property assets

Understandably, such stranded property assets are now the subject of serious review by impacted landowners and financial institutions such as banks and insurers.

Assessing the worth of stranded property assets requires not only a valuation of current worth but also an understanding of the impact of the cascade of time driven by currently applicable planning and development law. As mentioned, such endeavours require not only elucidation of current worth, but also a dispassionate assessment of the current and future risks for landowners, banks and insurers. Whatever actions are adopted by the impacted parties, those actions will be embedded with a range of risks associated with the specific action chosen.

As stated earlier, valuation methodologies that assume continuity of use or stability of regulatory conditions may inadvertently embed unacknowledged institutional risk. Further, the limits of regulatory security and the necessary adequacy of valuation practice require a detailed understanding of both macro- and micro-level legal and economic change.

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Statutes cited

Western Australian Planning Commission (WAPC). (2013). *State Planning Policy 2.6: Coastal Planning*. Perth: Government of Western Australia.

Western Australian Planning Commission (WAPC). (2015). *State Planning Policy 3.7: Planning in Bushfire Prone Areas*. Perth: Government of Western Australia.

References

- Abel, N., Gorrard, R., Harman, B., et al. (2011). *Sea level rise, coastal development and planned retreat: Analytical framework. Environmental Science & Policy*, 14(3), 279–288.
- Caldecott, B. et al (2013) *Stranded assets in agriculture: protecting value from environment-related risks*. Oxford: Smith School of Enterprise and the Environment, University of Oxford.
- Caldecott, B. et al. (2021) “Stranded Assets: Environmental Drivers, Societal Challenges, and Supervisory Response.” *Annual Review of Environment and Resources* 46(August), 417-447.
- Dixon, T. and Marston, A. (2005), “Taking the shopping centre online: new models in e-commerce”, *Property Management*, Vol. 23 No. 2, pp. 97-109.
- Eriksen, C., & Gill, N. (2010). *Bushfire and everyday life: Examining the awareness–action ‘gap’ in changing rural landscapes. Geoforum*, 41(5), 814–825.
- Government of Western Australia. (2024). *InHerit - 674-678 Hay St Perth*. Heritage Council Retrieved 05 March 2026, from <https://inherit.dplh.wa.gov.au/Public/Inventory/Details/4a5b6f3e-d22d-4a2b-83f6-2e02754cf34a>
- International Valuation Standards Council. (2024). *International Valuation Standards*. Effective 31 January 2025. International Valuation Standards Council.
- Markey-Towler, R. (2024) “Climate, Banking and Finance Law: Branching Disciplinary Divides to Address Climate Challenges.” *Environmental and Planning Law Journal* 40 (1), 43-57.
- McAuslan, P. (1980). *The Ideologies of Planning Law*. Urban and Regional Planning Series Vol.22.Oxford: Pergamon Press.
- Wrigley, N. and Lambiri, D., (2014) *High Street performance and evolution: a brief guide to the evidence*. Southampton: University of Southampton.