

How much is too much?

Reducing the regulatory burden

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EXECUTIVE SUMMARY

This paper presents the Roy Hill story of costs imposed through collective government action or inaction. We argue that the cost burden imposed on projects has gone too far: the time has come to redress the balance to reposition Australia as a more attractive investment destination.

1 INTRODUCTION

Over the years there have been innumerable inquiries, Parliamentary committees, studies and reviews attempting to address the issues such as duplication and unnecessary costs of approval processes. The most recent has been a report by the Productivity Commission which notes¹:

"While governments across Australia have often pursued reform of major project assessment and approval processes, outcomes have not always matched ambitions".

The Commission notes that there are negative consequences for Australia in not pursuing these reforms, including putting into jeopardy worthwhile investments with "high community wide net returns".

This has been our experience.

Roy Hill stands poised to deliver 'first ore on ship' in September 2015 with an accelerated ramp up to its name plate capacity of 55Mtpa during 2016, making it the largest single mine in Australia and one of the largest iron ore mines in the world.

The project has required the investment of more than 28 million hours and A\$10B in capital. It currently employs 5,700 construction workers and will provide employment for more than 2,000 people for 20 plus years of mine life. Over the project lifetime it is expected to contribute an estimated A\$17B in taxes and royalties to the State and Federal governments.

The project also represents very low environmental and operational risk to the Government: we have seen mining, crushing, railing and shipping iron ore at scale from the Pilbara for more than four decades. The regulatory agencies have had to address few, if any, novel risks.

By any measure, Roy Hill is a project with 'high community wide net returns'. And yet, the project has worn costs and barriers due to regulatory burdens that would have put similar projects in jeopardy.

That Roy Hill has been able to overcome these challenges is a testament to the quality of the project and the sheer tenacity and commitment of those few who have driven the project, the Chair Mrs Rinehart and her very small executive team and, in more recent times, key people within the Roy Hill team.

Let me give you four concrete examples where we believe the regulatory burden on the Roy Hill project has been excessive:

We have had to build an additional 35km of rail line involving earthworks, track work and supporting
infrastructure over rugged terrain. This was the consequence of poor government policy and decision

¹ Productivity Commission Research Report: Major project development assessment processes (March 2013: p. 351)

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making in prior years which came back to haunt our project. The cost has been an additional A\$300M capital and plus an ongoing operating cost penalty.

- We have spent nearly five years conducting studies, preparing reports and otherwise completing various applications for approvals – which in turn have collectively been 'under consideration' for more than 5 years.
- More 4,000 primary and secondary approvals. The resultant compliance costs are out of all proportion to the project risks. They also present a major hurdle to achieving the complex funding required for a project of this scale; and
- The cost of approvals and compliance is just part of the overall cost of the regulatory burden. The broader regulatory burdens and the dead weight of regulatory controls adds further to the overall cost burden.

Below we provide more detail around these specific examples and quantify their impact.

Roy Hill will provide more specific and detailed case studies over the coming months, including taking issue with Australian standards. The requirement to redesign plant and equipment to meet Australian Standards, when already designed to international standards, results in substantive additional costs to the business usually with no material benefit in terms of improved safety or performance. It effectively operates as protection of a small Australian market at the cost of reduced international competitiveness of our major industries.

It is easy to casually discount these remarks as self-serving but a moment's reflection should highlight a broader issue.

Australia is a long way from where it needs to be if we are to successfully combat the negative economic headwinds that confront us today. The imperative for change has lifted dramatically. Governments facing record debt levels increasingly need company and project related revenues. With prices falling for our major commodity exports, and with emerging lower cost competing projects coming on stream from overseas, our markets are under threat unless we can remain cost competitive. For the last decade there has been an implicit assumption in much of the governments' discourse that capital flows will come regardless because Australia has a natural resource advantage. The experience of the last 12 months should have disavowed people of that notion.

This paper outlines the economic cost to Roy Hill of what we see as excessive regulatory burdens. The government must urgently act to reduce these to allow Australia to successfully compete as an investment destination.

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2 COMPETITIVE BARRIERS – AN ADDITIONAL 35KM RAIL

The natural route for the rail line to transport Roy Hill's ore from the mine to the Port passes through a tenement held by FMG. By FMG's own reports the particular area of interest has no prospectivity for iron ore. But FMG, for no reason other than its competitive desire to impede the development of Roy Hill, and other possible mines, refused to allow Roy Hill access for a rail corridor.

As a result, Roy Hill had to build an additional 35km of rail that skirts around the FMG tenement. The reader may imagine an additional 35km of rail is not a big deal: this is to grossly misunderstand what is involved in approving and building a rail line.

The original bankable feasibility study, our environmental and heritage studies, and the approvals were all based on the preferred route. Roy Hill had to subsequently repeat the approval processes to accommodate the changed route: more engineering studies; more environmental studies; heritage studies; more rail approvals. And all to bankable feasibility study standard.

The revised route traverses much more difficult, rugged, hilly terrain crossing through some areas which are regarded as very sacred to the indigenous community. The additional earthworks, track installation and associated infrastructure (eg. bridges, culverts) resulted in an additional capital cost of nearly <A\$300M>. It has also created an expected A\$4M per annum in additional operating costs for the next 20 years due to greater fuel consumption and the maintenance of the additional track length.

These additional costs are more than just imposts on the project partners: they impact other stakeholders.

Costs which reduce the project economics invariably translate into reduced employment opportunities, or at least greater uncertainty around future employment, and a reduced capacity and appetite for contributing to the broader community. These are significant issues.

These additional costs also negatively impact the Federal Government, reducing future tax receipts by more than A\$115M as the capital and operating costs are offset against future revenue².

In addition to these more obvious costs resulting from the denial of access by FMG, there are negative second order consequences for both the State and Australia.

Perhaps most importantly there is the damage to Australia's longer term reputation as an attractive investment destination. The Federal Government's 'open for business' mantra is a positive phrase, but major investors pay attention to the deeds as much as the words. The impact of an <a>a> capex 'penalty' and ongoing wasted operating expenditure not only proved of concern to the Roy Hill partners, but it presented a substantial hurdle in securing the international project finance. And it does nothing to help allay international concerns about Australia's high cost environment.

Secondly, the additional 35km rail haulage also imposes a material sustainability cost which is ultimately borne by the broader community. There is an environmental cost both in the construction phase – added land

² The tax shield created by the write off of the additional ~A\$300M capex plus 20 years of an additional A\$4M per annum opex

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clearing, materials of construction and incurred energy costs – and during the operational phase due to the higher fuel consumption and consequently higher CO₂ emissions.

Given these issues, it should have been within the capacity of the Government to intervene to allow Roy Hill, and others, corridor access. However, the TPI State Agreement Act, which sets out the statutory framework for FMG's operations, included terms which allowed FMG to frustrate development in a manner that was contrary to the State interests, and yet left the Government without reasonable recourse to intervene in a timely fashion.

The counter to the above would be that the Government was respecting the rights of FMG as tenement holder. However, tenements are <u>not</u> awarded to allow companies to frustrate the ambitions of other competitors. Exploration licenses are awarded to allow the recipient to explore for minerals: as FMG had done and found no iron ore. That tenements are used simply to frustrate the development plans of another proponent and future proponents represents an abuse of the nature of the rights awarded. It is not in the interests of the State and should be prohibited.

This is an argument for ensuring State Agreements achieve the right balance between protecting the rights of the agreement holder and the State interests. There must be recourse for timely State intervention when 3rd parties act to deny proponents access by spurious use of rights which are not intended for those purposes.

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3 APPROVALS, COMPLIANCE AND THE REGULATORY BURDEN

Gary Banks, the former Chairman of the Productivity Commission, remarked some years ago: "the sense of wanting to be a good corporate citizen is almost palpable within the mining industry ... it is probably the pioneer in triple bottom line corporate thinking" ³ This is certainly our experience.

In the same address Banks noted that in 1991 the industry was significantly hampered by a plethora of regulations at all levels of government; in 1998 there were still excessive levels of prescriptive legislation. More recently Nicholas Gruen noted⁴ in an Industry Commission submission: "while many talk about deregulation, the reality is the bulk, complexity and compliance burden of regulation continues to grow".

Roy Hill is committed to fulfilling its obligations in terms of meeting reasonable Government and community expectations. But let us put some concrete numbers to this burden.

Since 2011 Roy Hill has had more than 4,000 approvals attached to the project covering the mine, rail and port. We expect an estimated 70 additional approvals will be required by 'first ore on ship' (FOOS).

The major demands were those approvals required by the Office of the Environmental Protection Authority – 82 primary approval processes – and the Department of Mines and Petroleum – 85 primary approval processes. These are not simple administrative exercises.

Let me put some figures on the overall approval timelines. We first began work on the environmental approvals required under the Commonwealth Environmental Protection and Biodiversity Conservation Act (2000) and the State's EPA 1986 Part IV process during the 3rd quarter of 2005. It took us until the first quarter of 2010 to complete the process: nearly 5 years. And then we entered the next major phase of approvals: the Mining Act, the Rail Safety Act and the Aboriginal Heritage Act (1972) – with still more approvals required under the State's Environmental Protection Act (1986). This added another five years.

The timeline for the major approvals is shown below: all up, a cumulative 10 years for approvals.

³ Gary Banks (2003) Minimum effective regulation and the mining industry. *Annual Industry Seminar – Minerals Council of Australia*

⁴ Nicholas Gruen (2007). Beyond Taylorism: regulating for innovation

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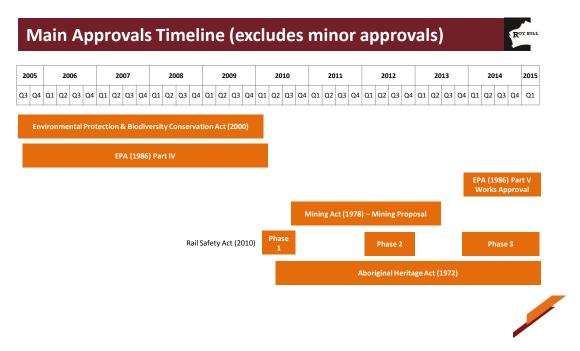


Figure 3-1: Main Approvals Timeline

While Roy Hill could have elected to bring forward some of the later approval processes to run in parallel, thereby reducing the overall timeline, the reality is that the uncertainty surrounding the specific outcomes of any environmental approval process, even for a project such as this with relatively benign and well known environmental impacts, creates risks if the proponent moves too far ahead without the formal environmental clearances.

But it is not just the overall timeline that creates imposts for the project.

The time investment by Roy Hill in submitting the primary approval applications over the last decade has been a cumulative 230 weeks: nearly 5 years of work. In turn, these primary approvals were 'under consideration' by the various agencies for a cumulative 282 weeks: more than 5 years. There were also numerous secondary approvals which could easily add another 20% to these figures.

What is the cost burden of these various approvals?

The most obvious costs are those costs incurred in preparing approval applications. At Roy Hill the project has incurred at least A\$55M in direct costs of approvals over the period 2011-2014. We conservatively estimate an additional A\$20M in direct costs for approvals over the period from FOOS through the life of mine: it will likely be substantially more.

But the direct costs of approvals are just one element of the cost of the regulatory burden. Once various approval processes are completed the business confronts not only the substantial cost of compliance with the conditions embedded in 3,000 separate approvals but also to monitor compliance and be able to demonstrate this to the myriad agencies involved.

The compliance costs to date – A\$100M over the period 2011-2014 – have been nearly double the costs of the approval process. When we look out over the period from FOOS through the life of mine, future compliance costs are *very conservatively* estimated at an additional A\$500M. If we combine the approvals and compliance

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costs over the project through to end of mine life, the total direct costs will be at least A\$675M. These numbers exclude the ongoing cost of rehabilitation – estimated at A\$130M in NPV terms – which are an accepted normal cost of mining.

These numbers reflect only the direct costs incurred by Roy Hill: they do not attempt to account for the costs incurred by the various Government agencies in assessing these applications for approval, and the ongoing monitoring and review of compliance.

In an era where Australia has seen a large number of 'mega projects' and record profits among the iron ore miners, it is easy to get blasé about large numbers and simply put it down as the 'cost of doing business'. But we have to challenge some of these presumptions if we are to rebuild Australia's competitive position, especially during this phase of the investment cycle.

Regulation is intended to serve a vital role in improving environmental and economic standards for Australians. But regulation is not free. It uses scarce resources which could be directed to other more productive activities, both within the companies it seeks to regulate, and among the government employees who are charged with creating, administering and monitoring these regulations.

More than two decades ago the then Prime Minister Bob Hawke introduced the concept of 'minimum effective regulation'. In essence minimum effective regulation requires three things:

- 1. It must deliver a net benefit to the community;
- 2. It must be the most effective way of addressing the issue; and
- 3. It should impose the least possible burden on those regulated and the community.

We do not resile from our commitment to operate in a responsible manner: this is central to our philosophy and operating mantra. But it is entirely reasonable to challenge whether the current regulatory framework meets the 'minimum effective regulation' benchmark.

On the numbers above it is highly unlikely that this is the most effective way of addressing the regulatory goals. And it is impossible to argue that this represents the least possible burden on the project:

- More than 4,000 primary and secondary approval applications before we put ore on a ship;
- 230 weeks to prepare and submit the primary approval applications;
- 282 weeks of primary approvals 'under consideration';
- a cost of approvals in excess of A\$75M; and
- compliance costs greater than A\$600M over the project life.

And this is despite years of inquiries, submissions and reports seeking to streamline the approval process. On any reasonable measure these costs of approvals and compliance are extraordinary.

But this is just part of the costs of the regulatory burden imposed on Roy Hill. One commentator on US regulatory issues has suggested compliance costs amount to only $1/3^{rd}$ of the aggregate regulatory burden. The broad categories included environmental and risk reduction; price and entry controls; and paperwork (of which tax is the major contributor). Whilst there is debate about the specific numbers, a former administrator

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of the US Office of Information and Regulatory Affairs⁵ characterised it as "a rough indicator of regulatory activity, best viewed as an overall measure of the magnitude of the overall impact of the regulatory activity on the macro economy".

If we applied the US derived heuristic to Roy Hill using the actual approvals costs and conservatively estimated total compliance costs, it suggests that the real cost of the regulatory burden, including compliance costs, is around A\$1-1.5B.

These costs impact at two levels: they impact directly on the business and they impact our supply chain and service companies, which in turn pass these costs onto our project. We can offer two specific examples of costs incurred by our project which are significantly impacted by the regulatory environment beyond just the approvals and compliance area.

The first of these is the cost of port services at Port Hedland. The Port Hedland Port Authority (PHPA) is a government trading enterprise (GTE) which operates as a transport infrastructure monopoly. As such they are price setters, not price takers. The WA Government sets the target for the expected return on asset (ROA): the Authority's most recent target ROA was 6.5%. Its actual return over the last three years has been 12-30%. On any measure this is an excessive return on capital from a GTE at the cost of users like Roy Hill.

The second example comes from a recent World Bank study⁷ which examines the relative ease or difficulty for entrepreneurs to do business in across different economies. One dimension of the study looked at the cost of trading across borders, an issue vital to our project. It compared the cost to import a container in Australia compared to the cost in New Zealand: viz.

	Australia	New Zealand
Cost to import (US\$ per container)	1220	825

Table 3-1 Cost to Import

These two examples illustrate how the cost structures that apply in Australia – in two operating environments that are heavily shaped by the regulatory environment – impose a heavy cost penalty on the likes of Roy Hill.

⁵ Cited in Congressional Research Service report: Analysis of an estimate of the total costs of Federal regulation (2011: p. 21)

⁶ Preston Point Consulting: Fees & Charges at the Port of Port Hedland (Preliminary report for CME: 2015)

⁷ World Bank: Doing Business2015 – going beyond efficiency. Economy profile Australia 2015.

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4 THE COST OF DELAYS

However, these estimates of the cost burden do not capture economic impact of delays, including the impact of existing regulatory and approval processes. An earlier paper⁸ submitted to the State Government by Roy Hill detailed a series of specific issues which created delays, including inter-agency conflicts, statutory versus administrative approvals, the need to allow preliminary works to occur in advance of primary level approvals, and many more. While the Government has moved to address many of these issues, there remain many areas where delays can occur.

At an aggregate level, the average coal project in Australia experienced an additional 1.3 year delay relative to those approval timelines experienced elsewhere⁹. The BAEconomics noted that a 12 month delay was a tipping point at which 30% of planned mining projects would be cancelled and modelled the impact of 12-24 month delays at an industry level. Reducing approval timelines by just 12 months would reduce costs by 2.6% which could lead to an additional A\$46B in capital investment over 12 years as a direct result of enhanced competitiveness. These are material opportunities which Australia cannot afford to ignore.

However, each project has its own complexities in terms of timing and possible causes of delays. Rarely are these simple to deconstruct. Thus, in the case of Roy Hill, securing project funding took significant time partly because it represented an innovative funding arrangement. But the project financing was also made more difficult and therefore slower due to the long and complex approval processes. The nature of 3,000 primary and secondary approval processes inevitably means that a project moves forward more slowly than it otherwise would.

We modelled the impact of a 12-24 month delay on a project which has similar characteristics to the Roy Hill project simply to illustrate the economic impact of delays on major projects. We assumed that the capital spend occurs over the same time frame, so that if a delay occurs, it occurs before the capital spend has begun.

Within this scenario, we modelled the impact of a 12 and 24 month delay with varying assumptions around capital escalation: viz.

- 1. Assumed 12 month delay ...
 - a. no capital cost escalation
 - b. with 5% cost escalation
 - c. with 10% cost escalation
- 2. Assumed 24 month delay ... capital spread over additional 24 months
 - a. no capital cost escalation
 - b. with 10% cost escalation
 - c. with 20% cost escalation

An assumption of no capital escalation with increased project timelines is unrealistic, but it represents an 'absolute minimum' cost impact of a delay. Any delay which extends the project timeline inevitably incurs additional costs due to cost inflation.

⁹ Port Jackson Partners (2012): Opportunity at Risk – regaining our competitive edge in minerals resources

⁸ The Roy Hill Iron Ore and Infrastructure Projects – approvals analysis (2013)

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The choice of 10-20% (12-24 month delays respectively) as capital escalation rates represents the upper range of capex escalations, reflecting the reality of the last 5 years of Western Australia's over-heated capital project market. The 5-10% (12-24 month delays respectively) escalation rates represent a more moderate scenario.

The resultant impact of these scenarios relative to the base case NPV estimated using this simplified model is summarised in the table below. As noted above, these provide an indication of the magnitude of the impact.

	12 month delay	24 month delay
No capital escalation	575M	1,100M
5% per annum capex escalation	950M	1,775M
10% per annum capex escalation	1,300M	2,475M

Table 4-1NPV impact of regulatory delays (AUD)

At 5% escalation rates the cost of a 12 - 24 month deferral could be of the order of \$1-2B. In the overheated market we've witnessed over most of the last decade, these same delays could cost a project of this scale up to \$1.3-2.5B respectively.

These numbers might look extraordinary: they are. But they are also realistic order of magnitude estimates of the impact of delays on project economics. Note that major delays which occur once the major capital spending has begun can substantially increase these numbers. For example, a twelve month delay once spending has begun could cost the project more than \$2B in economic terms.

Note that these numbers assume there is no price differential between the original timeline pricing assumptions and the actual pricing in the market when the project begins. In the case of iron ore, we have seen the pricing come off substantially over the last two years: from around \$135/t to \$65/t.

If we assume the average price over the last two years was around \$120/t, then against the current pricing, the foregone earnings before tax is around \$3.3B per annum. And it is not just the participants who lose out due to any delays in this environment. The cost to the Federal government in terms of tax translates to nearly \$1B per annum; the cost to the State in terms of foregone royalties amounts to around \$165M per annum. This represents a substantial cost to all parties

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5 LOOKING AHEAD – THE PRODUCTIVITY DRAG

Looking ahead, Roy Hill will remain capped at a 55Mtpa production rate throughout the project life. This means we will be entirely dependent on our ability to produce 'smart tonnes' rather than incremental tonnes to meet our finance repayments, deliver investor returns and make a substantial contribution to the Government via taxes. To achieve that, we have established some core values and an operating philosophy which includes a sense of urgency, applying new technology and practises, and applying innovative, risk managed decision making.

But pushing against this will be the dead weight of regulatory controls. It was recognised more than 40 years ago in the Robens' inquiry that regulation cannot keep pace with the range of conditions and rate of change within the economic system. Economists¹⁰ have long agreed the biggest burden of rules and regulations arises because an excess of rules saps incentive, enterprise and innovation across the economy: they are a drag on productivity. This is more than the misallocation of resources. An overbearing regulatory framework suppresses the freedom to experiment, to push boundaries and to search for new pathways to increased productivity and lower cost.

If the various economists are right, the cost the 'dead weight of regulation' impacting on the productive efforts of the workforce in pursuing its goal of 'smart tonnes' might be substantially more than A\$675M.

Cost Driver	Estimated impact	Explanatory Remarks
Additional 35km rail route	350M	Value of additional cash flows (capex+opex)
Approvals & Compliance	675M	Based on known and conservative estimates
Additional regulatory burden	1,350M	Based on '1/3 rd heuristic' from US research
Dead weight of regulatory controls	675M	Generic economic estimate
TOTALS	ca. 3,000M	Order of magnitude indicator of the impact of the regulatory activity on the project

Table 5-1: Summary of Regulatory Impacts (AUD)

¹⁰ Deloitte (2014). Get out of your own way: unleashing productivity

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Of course, there always will be regulatory demands, intended to deliver enhanced environmental and economic outcomes, which will impose burdens on organisations.

But the reasonable question is 'how much is too much?'

Each interest group pursues its own narrow agenda, each one creating its own economic drag. The impact of each individual constraint is barely felt outside the project. But over time these impacts accumulate until we find that projects no longer attract investors to Australia. Investment dries up. Job growth slows. Government's corporate tax receipts suffer. This is the inevitable consequence of a pattern where 'micro logic sums up to macro nonsense': where individual regulations do not raise concerns, but collectively they create major concerns.

We are at the point now where the cumulative regulatory impost is now a major issue: an A\$3B cost of government impact on an A\$10B capital project is extraordinarily high – we think too high.

So, how much is regulation should we reasonably be expected to bear? There is no easy answer to that, but 'we must do better' is an entirely inadequate response.

Perhaps we can take our cue from the parallels in the corporate world?

Over the last decade the global mining industry has been on a growth binge. Companies grew like topsy, not just in their operating arms, but also in their various functional areas. Each decision in isolation may have seemed reasonable, but collectively they accumulated to produce a decade of double digit cost escalation. The industry now has to unwind these excesses.

So, how does the industry address this issue? One well recognised pathway to redress the cost imbalance begins with a simple goal: take 20% out of the cost base. The major global consulting houses will often adopt this philosophy as they guide their clients out of the wilderness back to a more sustainable operating base.

We suggest governments could take the same approach to redressing the overall regulatory burden. Establish an explicit target: a 25% reduction in regulatory burden. Whilst this lacks an evidence based rationale, two decades of inquiries into streamlining the approval processes without delivering on expectations suggests a new approach is required. A target of 25% improvement makes clear to the policy and decision makers that the goal is transformation rather than incrementalism.

That doesn't mean governments simply excise 25% of current regulations. Mining companies that have reduced their cost base by 25% are still producing the same or more output. But they have become much more focused on what really adds value, revisiting work practises, restructuring to ensure people are working at the right level, adding value where they are meant to be.

Some simple lessons from the Roy Hill perspective are

- we need to learn from the experience of varying State Agreements ... no one proponent should be allowed to disadvantage another for pure competitive reasons. There must be an overarching process which allows the State to intervene when there is misuse of rights even under an agreement act
- There should be a much stronger, single, fast track macro approach to approval processes which can provide an overarching government approach to major projects

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• Reporting and assurance should be risk based rather than administratively based. It should reflect the risk of the activity it seeks to monitor rather than simply requiring routine reporting for no material benefit to the State or agencies.

Importantly, we are not advocating major inquiries into further streamlining of regulation. Inquiries are too often a cover for inaction. This scale of change cannot be delivered incrementally. It demands courage and action by leaders who are focused on delivering transformation rather incrementalism.

Let me close with a quote which summarises the call to action:

"There are risks and costs to action, but they are far less than the long range risks of comfortable inaction" (JF Kennedy)