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A problem for all: disputes that may arise as costs escalate on construction projects

BY JAMES CLARKE, JENNIFER INGRAM, JAMES MACDONALD & HANNA LEE

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An overview of this issue

The aftermath of Covid-19, the Russian invasion of Ukraine and factors such as the post-Brexit fallout and unprecedented weather events in Australia have all contributed to the almost unprecedented levels of cost escalation being experienced globally. This undoubtedly presents a significant challenge for those procuring infrastructure projects. Around the world, procuring authorities are grappling with how best to deal with escalating prices and situations in which bidders may be refusing to adhere to the kind of fixed price bids so often favoured by authorities looking to secure a price within their budgetary constraints. Bidders themselves are grappling with these challenges as the inflationary pressures and the constant state of flux in supply chain costs pose challenges for bidding strategies. With the infrastructure market remaining 'hot' in many parts of the world, how will cost escalation affect the bidding market and the feasibility of building major infrastructure projects? This article draws on our recent experience in the infrastructure market globally and looks at what solutions are emerging to deal with these issues.



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A problem for all: disputes that may arise as costs escalate on construction projects

Unprecedented cost escalation resulting from a multitude of global factors has introduced significant challenges to infrastructure project procurement. Fixed price bids are increasingly refused by bidders as inflationary pressures and shifting supply chain costs upend traditional bidding strategies. Yet, despite these challenges, much opportunity remains. This article draws on our recent experience in the global infrastructure market to identify emerging solutions to an increasingly difficult inflationary market.

Managing competition law risks in the race to net zero – an infrastructure perspective

As environmental factors increasingly influence the way the world does business, companies face mounting pressure to innovate and adapt to meet sustainability goals. The infrastructure sector is not immune, with strong drivers to transition infrastructure operations – many of which are intimately connected with activities that produce greenhouse gases – to "zero-emissions". Although tackling the challenge of climate change calls for a collective response, sustainability strategies and solutions which involve agreements between competitors raise significant competition law risks. This article explores the interaction between competition law and sustainability initiatives, examining key risks that may arise for the infrastructure sector and reminding entities that, despite pressure to pick up the pace, competition law compliance must not fall behind in the race to net zero.

German Chemical Parks: opportunities, challenges and Trends for investors

Against the recent trend of chemical park transactions in Germany, the article sheds light on the historical background of chemical parks in Germany and the typical situation today with park operators on the one hand and park users on the other. The article also describes typical legal risks that investors should be aware of when considering investment in chemical parks.

Building a Better America with progressive contracting models -Five guiding principles for implementation

This article outlines some of the key elements of two phase collaborative contracting. It then highlights some key reasons why a project owner might consider utilizing a two phase collaborative contracting model, followed by [five] guiding principles for implementing two phase collaborative contracting successfully.

Infrastructure Industry - Cost escalation in infrastructure projects

As construction costs in Australia continue to rise due to material and labour shortages combined with unprecedented infrastructure investment, contractors are demanding that cost escalation risks are addressed within construction contracts. The absence of an appropriate cost escalation clause increases risk of disputes as costs increase and contractors consider abandoning projects. This article reconsiders the value of fixed priced contracts, provides recommendations for appropriate implementation of cost escalation clauses and identifies the basis of potential disputes.

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A problem for all:

disputes that may arise as costs escalate on construction projects

Authors: James Clarke, Jennifer Ingram, James MacDonald & Hanna Lee

Pincipals and contractors should be prepared to manage the risks associated with the continued rise of construction costs in order to avoid disruptions and disputes.

WHAT YOU NEED TO KNOW

- Construction costs are projected to continue rising well into 2023, with a shortage of materials and labour combined with the unprecedented investment in the Australian infrastructure space contributing to price increases at levels never seen before.
- Increasingly, in this climate, contractors are pushing for the risk of cost escalation to be directly addressed in construction contracts, no longer comfortable with common mitigants such as contingencies.
- In the absence of an appropriate cost escalation clause, there is a greater risk of disputes arising as increased costs become practically unmanageable and contractors consider walking away from projects (with or without a legal right to do so). This can have a significant impact on project delivery.

WHAT YOU NEED TO DO

- You should firstly consider whether fixed priced contracts are appropriate for your type of project.
- To minimise the risk of disputes and deliver value for money, you should consider implementing an appropriate cost escalation clause in your contracts, with a particular focus on what costs are escalated, appropriate indices, when the clause is triggered and any relevant restrictions on its operation.
- Even with a cost escalation clause, parties should still tread carefully – if the clause is not drafted clearly and unequivocally, disputes surrounding the application of the clause inevitably arise.

In our recent Infrastructure Industry Update we discussed how cost escalation has created significant challenges for those procuring infrastructure across the globe. While there is no "one size fits all" model to address the issue of cost escalation, it is apparent that to mitigate the risk, the approach needs to be tailored towards the specific project. We also discussed the ways in which procuring authorities in some jurisdictions have provided bidders a degree of protection against the current inflationary environment.

In this article, we look further at cost escalation clauses that parties may implement to mitigate these risks and the disputes that may arise in the absence (and sometimes even in the presence) of these clauses.

WHY DOES COST ESCALATION MATTER?

Construction costs are projected to continue rising well into 2023, as material and labour shortages fail to show any signs of abating.

Contractors have traditionally borne the risk of fluctuating labour and material costs. In the absence of appropriate cost escalation clauses, increased costs driven by labour and material shortages which may be largely outside of a contractor's influence could quickly become unmanageable, sometimes leaving the contractor facing a decision about whether to repudiate the contract and walk away. This can lead to substantial delays to the project and even further costs to the principal, which may or may not ultimately be recovered from the contractor.

As such, when the risks of cost escalation are not appropriately managed, there can be no winners.

THE KEY DRIVERS OF COST ESCALATION

As discussed in our recent Infrastructure Industry Update, the effects of Covid 19 continue to plague the industry, causing material shortages and production and shipping delays. Exacerbating this is the unprecedented investment in infrastructure across Australia, resulting in an abundance of major projects being procured simultaneously across the country, leading to significant demand for labour. Reduced immigration as a result of COVID-19 has only worsened the skills and supply shortage.

While these issues are not new to the construction industry, the perfect storm of labour and material shortages and inflation have catapulted the industry into a period of rising costs never seen before.

HOW HAS THE CONSTRUCTION INDUSTRY TRADITIONALLY DEALT WITH COST ESCALATION?

Typically, cost escalation has been dealt with by:

- the parties reviewing the allowances for construction or labour costs at various stages throughout the project's planning and procurement stages;
- the parties purchasing materials in advance or "locking in" a fixed price with the relevant suppliers; or
- including a contingency allowance in the project budget, being a sum or percentage that covers any unforeseen events or risks arising out of the project.

COST ESCALATION CLAUSES

It is becoming increasingly clear that in today's climate, contractors are less and less comfortable with the common mitigants outlined above and they may not deliver value for

money to the principal. Rather, parties are now seeking more certain mechanisms to manage cost escalation – costs escalation clauses.

Cost escalation clauses can protect a contractor's interests by providing that the price of works is adjusted to account for an increase in material or labour costs. Compare this to a traditional fixed-price contract, where the contractor is tied to the costs or rates agreed to at the time, regardless of any future fluctuations. This can be problematic for projects that often take a lengthy period of time to construct and finalise. A cost escalation clause shifts the risk in the principal's direction, though there are often limitations on the application of the clause.

The most common cost escalation provision is known as a "rise and fall" clause. Using this mechanism, the parties agree that the contract price will be adjusted to reflect the indexation of specified project costs (but not volume). This mechanism may apply to the period between tender submission and contract execution or (increasingly) may continue through delivery.

When considering rise and fall provisions, parties must be clear on how they will be applied in practice, specifically, what costs are escalated, what indexes are applied and when they will trigger. For example, the clause may apply only when a specific threshold is reached (such as when material or equipment cost increases by more than a set percentage).

Other cost escalation mechanisms include cost sharing and benchmarking regimes. Cost sharing involves the parties agreeing to target costs and each sharing a specified percentage of any cost overrun or underrun. Benchmarking involves market testing specified costs at agreed points in time and adjusting the contract price based on prevailing market prices.



WHAT DISPUTES CAN ARISE IN THE ABSENCE OF COSTS ESCALATION CLAUSES?

If a construction contract is not equipped with clauses that address cost escalation, it may be a breeding ground for disputes.

Delay claims

Contractors with valid delay claims may be entitled to additional labour, material or equipment costs that arose as a result of the delay. Where parties have not agreed on how to deal with rising costs, disagreements often arise as to whether the contractor is entitled to compensation for the increased costs.

Change in law

Contractors may argue that unforeseen costs arising from a "change in law" should be passed on to the principal. Contracts can include a "change in law" clause which addresses regulatory changes – such clauses may give the contractor rights to an extension of time, suspension, or additional costs in the event of such change. An example of when a "change in law" clause may be enlivened is the recent COVID-19 measures in China. These measures have impacted shipping timeframes and material availability, leading to increased costs for contractors. A contractor may seek to argue that the measures constitute a "change in law" and that they are entitled to the recovery of such increased costs. Whether or not such an argument has merit will depend on careful consideration of the specific language used in the relevant clause.

Force majeure

In contracts with force majeure clauses, contractors may seek to argue that the rise in costs outside of either party's control (or the factors causing such cost increases, such as COVID-19) constitute a force majeure event under the contract, entitling them to an extension of time or relieving them of their obligations.

Frustration

Contractors may also seek to argue that the contract has been frustrated, where, without the fault of either party, the significant price increase has rendered it impossible for the contractor to perform the contract as contemplated.

Typically, for both force majeure and frustration, the bar is set very high. Price movements rendering it more difficult to perform the contract may not be sufficient, unless it can be proven that the obligations under the contract have become radically different to that contemplated by the contract and not simply more onerous.

Repudiation

In extreme cases, contractors or subcontractors may no longer be able to economically fulfil the contract if they are forced to bear the burden of the escalated costs. As such, contractors may threaten to walk away from the project, effectively repudiating the contract. Principals or owners can then elect to:

- accept the repudiation and terminate the contract; or
- continue with the contract.

In either case, the principal may be entitled to damages. Such damages are likely to be calculated by reference to:

- the loss which the principal/owner suffered as a result of the contractor's breach (eg the additional cost of having someone else complete the work); or
- the profits the principal/owner would have expected had the contract been performed minus the costs they would have incurred to earn that profit.

While the principal may be entitled to damages, there may be substantial time and cost involved in pursuing a claim, as well as the risk that the amount owing cannot ultimately be recovered from the contractor (eg because of insolvency). In the meantime, the principal may also be left struggling to get their project completed.

Can disputes arise even with the appropriate clauses?

The use of an appropriate cost escalation clause can help to reduce the risk of disputes arising. However, it is important to recognise that disputes can arise even when parties are armed with the appropriate clauses.

As discussed above, a costs escalation clause will not necessarily cover all increases in material or labour cost and may be restricted in its application.

Disputes can eventuate where there is a cost increase that the parties failed to contemplate and build into the clause. Disputes can also arise as to the application of the clause itself, particularly in respect of when and how it applies and whether a price increase has been accurately calculated. For example, where benchmarking is used, parties may be in disagreement as to the applicable market price, affecting their respective calculations. As such, expert evidence may be necessary to determine the accurate calculation of the cost increase.

Parties should ensure that the clause is drafted as clearly and unequivocally as possible so as to prevent any misunderstanding of its application. This may include considering:

- specifically setting out the events that trigger the cost escalation mechanism (for example, a certain percentage increase in the cost of a specific material or service, calculated with reference to a certain benchmark or market rate); and
- an overall cap on the amount the contract price can be increased.

Parties should also consider including an appropriate alternative dispute resolution clause which provides an effective, efficient and appropriate forum for the dispute to be addressed. Further guidance on drafting these clauses can be found in our Quickguide: Dispute Resolution Clauses.

Taking these preventative steps will help safeguard the commercial and financial interests of all parties involved.



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Managing competition law risks in the race to net zero – an infrastructure perspective

Alyssa Phillips & Alexandra Martin

INTRODUCTION

Tackling the climate change challenge calls for a response that is both quick and collective. However, sustainability strategies and solutions which involve agreements between competitors or customers and suppliers, or representations about environmental credentials, may raise significant competition and consumer law risks.

Although these legal risks are not novel, the climate change context is. Recognising this, this article explores the nexus between competition law and sustainability initiatives in the infrastructure sector, examining common competition law risks across five key areas:

1. Industry collaboration agreements
2. “Greenwashing” and the rising trend of green claims
3. ESG considerations in mergers and acquisitions
4. Exclusivity obligations
5. Competition between states

THE ROLE OF SUSTAINABLE AND RESILIENT INFRASTRUCTURE

Given its share of greenhouse gas (GHG) emissions, decarbonising infrastructure is considered vital in the long-term transition to net zero and achieving the goal of limiting the increase in global warming to 1.5% above pre-industrial levels as per the Paris Agreement.

It is important not only that an asset is constructed from sustainable materials so that it has a meaningful effect on emissions reductions, it must also be sustainable in terms of daily operations. Research by the Global Infrastructure Hub estimates that infrastructure is responsible for more than half

(approximately 53%) of total GHG emissions.¹ Of this, only 10% is attributed to emissions from the construction process, with the remaining 43% a result of operational emissions, including electricity use in buildings, and road transportation.

Adapting infrastructure to withstand the impacts of climate change is also high on the priority list, as fears mount over the compounded impacts on infrastructure of wildfires, floods, droughts, heatwaves, storms and rising sea levels driving a transition to infrastructure that is not only sustainable, but also climate-resilient.

These emerging challenges call for new approaches and new technologies, neither of which are cheap. Collaboration and innovation have been touted as key to achieving the collective goal of sustainable and resilient infrastructure. However, this has to occur in a manner consistent with existing competition and consumer law regulations, which exist to protect economies, markets and consumers.

INTERSECTION OF NET ZERO, INFRASTRUCTURE, AND COMPETITION LAW

The “net zero” label has never been more attractive for companies. The recent conclusion of COP26 placed the challenges posed by climate change at the forefront of government and business agendas alike, with increased urgency. With most G20 countries now having pledged carbon neutrality by 2050 the “race to net zero” is definitely on,² and private industry is rallying to show its commitment to the cause.

For the infrastructure sector, it is now a matter of how quickly and efficiently infrastructure planning and implementation can pivot to meet this goal. The sector’s vast scope makes this no easy feat – infrastructure spans all industries, including transport, the built environment, water and waste, meaning there’s no “one size fits all” solution nor any single entity that can alone effect the requisite change.

That said, any collaboration between businesses, particularly competitors, as well as how a company publicises and reports on its environmental, social and governance (ESG) efforts, requires careful risk management to avoid infringing competition and consumer law.

Competition law promotes market competition through the regulation of anticompetitive conduct by companies. The goal is to benefit consumers and business by keeping prices low, while the quality, quantity and variety of goods and services remain high. Importantly, a competitive market also stimulates enterprise and efficiency, encouraging business to improve and innovate, which benefits customers.

While some competition regulators have voiced their support for the transition to a low-carbon economy,³ competition law is yet to recognise any overarching exemption or defence for ESG-related

¹ Global Infrastructure Hub, “Advancing the circular economy through infrastructure: Transition pathways for practitioners in circular infrastructure”, 17 November 2021 <Advancing the circular economy through infrastructure (github.org)> at p 8.

² The Climate Action Tracker and Net ZERO Tracker websites keep track of worldwide progress towards climate goals, including commitments pledged and progress of each country.

³ See recent press releases published by the German Federal Cartel Office (FCO) on 18 January 2022 and 25 January 2022, which demonstrate the regulator’s willingness to review and assess sustainability initiatives and their compatibility with competition rules, and to provide guidance on the conditions under which sustainability goals in cooperation agreements between competitors may be sufficient to exempt such agreements from the prohibition on anti-competitive agreements in Article 101(1) of the Treaty on the Functioning of the European Union (TFEU) and equivalent German provisions.

matters, meaning the law still applies to conduct regardless of any ancillary ESG objectives.

Avoiding breaches of competition law when pursuing ESG initiatives is imperative, as the consequences of a breach are severe. Not only do companies face significant fines, in numerous jurisdictions (eg the UK and Australia) the individuals involved may incur substantial pecuniary penalties, be disqualified from managing corporations, and even face potential imprisonment where found to be criminally liable. Additional consequences of a breach include adverse publicity and reputational damage, commercial consequences such as void contracts, and significant cost, all of which may prove crippling to both the business and the individuals involved.

Key to keeping within the bounds of the law is ensuring that firms neither collaborate nor use misleading advertising or reporting to the detriment of consumers.

Importantly, contravention is not always obvious. Cooperation between firms may be illegal despite any legitimate basis for that cooperation, such as furthering ESG initiatives; and the complexity of certain ESG measures, such as emissions reduction calculations, means it can be easier than expected to cross the line into false or misleading conduct. Pressure from governments and/or industry to resolve or meet certain ESG goals is also no excuse.

However, amid the challenges, equally significant opportunities await companies willing to adapt within the bounds of the law.

INDUSTRY COLLABORATION - ILLEGAL COLLUSION OR PRO-COMPETITIVE COLLABORATION?

As pressure mounts to strengthen ESG performance, companies are increasingly seeking to collaborate in the innovation and implementation of sustainability-related strategies.

This growing movement has seen such arrangements take on their own colloquial term – “sustainability agreements” – which refers to collaborative arrangements between businesses (including industry-wide initiatives and decisions of trade associations) to achieve sustainability goals and tackle climate change. For example, businesses may agree to work together to reduce their carbon footprint, improve environmental credentials of their products, set environmental standards, reduce environmentally harmful substances, or determine how to handle the costs of environmental protection measures.

However, competition law does not always make it easy to legally advance ESG initiatives, at least where collaboration is involved. Although a collaborative approach may be well intentioned and effective in using pooled knowledge and resources to foster enterprise and innovation, it will nonetheless be illegal where it is found to have an anticompetitive purpose or effect – such as conduct that amounts to a cartel or an otherwise anticompetitive arrangement or concerted practice.

While in theory such anticompetitive conduct may seem obvious, in reality, there is not always a clear line between collaboration that which is permitted and that which is illegal. Caught up in the drive to transition to a greener future, infrastructure companies may not realise when they are approaching the risky territory. In light of this, we highlight the following scenarios, which we believe present key risks for the infrastructure companies engaging in collaboration.

New industry standards

Sustainability agreements commonly involve standard-setting arrangements by which businesses, often through trade associations or standardisation organisations, set standards for the environmental performance of products, production processes, or the resources used in production.

Although cooperation on standard-setting may be legal in many scenarios, new industry standards that are accompanied by agreements to exchange information on the progress being made to achieve them, could amount to a concerted practice or cartel if care is not taken to monitor the nature and volume of information being exchanged, or if the standards affect the price, production, market-allocation or other features of products or services being supplied into the market by the parties to the agreement. Companies must remember that competition rules will apply even where the standard is developed to pursue a legitimate objective and/or meet regulatory standards.

For example, a company wants to set a new emissions target to reduce GHG emissions. However, the costs of doing so will inevitably filter down to customers, creating the real risk that the company will lose business to competitors who are able to continue to maintain lower costs. One solution is for the company to agree with their key competitors that they will all comply with the target, by implementing an industry standard which includes passing agreed buckets of costs through to end users – thus removing the “first mover disadvantage”.

Without any applicable defence or authorisation, such conduct may constitute an illegal cartel, or an otherwise anticompetitive arrangement or concerted practice, regardless of any wider environmental advantages.

The Australian Competition and Consumer Commission’s (ACCC) prosecution of the “laundry detergent cartel” highlights the risk of how a sustainability initiative, in this case an agreement to

undertake an industry-wide transition to ultra-concentrated laundry detergents, can lead to allegations of anticompetitive conduct. In 2013, the ACCC took action against Cussons, Colgate and Woolworths for allegedly colluding to cease supplying standard concentrate detergent while simultaneously moving to the supply of ultra-concentrated detergent. Despite the environmental benefits of the agreement (less laundry liquid means lower-cost transportation and less packaging, chemical effluent, and retail/warehousing space), the ACCC prosecuted the conduct on the basis that, among other things, the parties had agreed that the laundry detergent producers would maintain the price of their products rather than passing on any cost savings to customers.

Importantly, an actual anticompetitive effect (such as a material and sustained price increase) is not required for the conduct to breach the law (although this will make it riskier), as the purpose or likely effect of either “price-fixing” (for cartel conduct) or substantial lessening of competition (for anticompetitive arrangements) will trigger the prohibitions. Although the more sustainable option will not always result in higher costs, it is often the higher cost which drives the need for collaboration, leaving companies with what appears to be a difficult choice – risk breaching competition laws in efforts to collaborate to further ESG goals, or stick to unilateral conduct and risk being left behind. Notwithstanding, legal advice can remove this apparent ultimatum and enable companies to avoid the risks inherent in collaboration, while enjoying the rewards.

The German FCO’s offer to “advise businesses on cooperations and provide guidance especially on how to ensure that sustainability strategies are embedded in competition law” is just one example of this shift, with the regulator recently reviewing three separate collaborations between competitors involving

sustainability initiatives:⁴ an initiative launched by the German Development Organisation and German retailers to support living wages in the banana sector by increasing purchases of bananas grown and sold by farms providing “living wages” for their workers; an animal welfare initiative between the agricultural, meat production and food retail sectors to reward livestock owners for improving the living conditions of animals; and a milk surcharge initiative between German milk producers involving the introduction of standard surcharges in favour of raw milk producers.

In summary, the FCO did not express any competition concerns about the banana sector project as the cooperation did not involve the exchange of procurement prices, other costs, production volumes or margins nor the introduction of compulsory minimum prices or surcharges. The FCO was more critical of the animal welfare initiative as it involved a standardised payment to livestock owners; however ultimately it was prepared to accept the scheme for a transitional period until 2024, while urging the parties to include more competitive elements, such as replacing the current standard payment with a recommendation to pay compensation for animal welfare costs, and stressing the importance of transparent labelling (which informs consumers about origins of animals and their living conditions). In the third cooperation project, the FCO concluded that such surcharges, without the goal of increasing sustainability, were mere price-fixing schemes and contrary to competition law. The decisions demonstrate that coordinated schemes and initiatives must be in clear pursuit of sustainability-related objectives, and must continue to promote competitive elements in pursuit of those objectives, in order to meet the FCO’s conditions for exemption.

Collaboration on ESG – use of standard settings

When entering into sustainability agreements, businesses and trade associations should consider the following key points so as to minimise harm and competition law risk:

- Focus on features bringing genuine (quantitative or qualitative) efficiencies to consumers
- Guarantee that all competitors in the affected markets can participate in the standard-setting process
- Ensure the standard is voluntary and open to all, with non-discriminatory and fair access
- Exchange data only where necessary, and in an anonymised and aggregated format
- Do not use cooperation in achieving legitimate aims as a cover for a cartel
- Do not exchange or disclose commercially sensitive information that goes beyond what is necessary for setting the standard
- Do not rule out the possibility of developing alternative standards

⁴ FCO press release “Achieving sustainability in a competitive environment – Bundeskartellamt concludes examination of sector initiatives” 18 January 2022 https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2022/18_01_2022_Nachhaltigkeit.html?nn=3599398; FCO press release “Surcharges without improved sustainability in the milk sector: Bundeskartellamt points out limits of competition law” 25 January 2022 < https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2022/25_01_2022_Agrardialog.html?nn=3599398 >.

Pilot technology

The sudden demand for sustainable innovation and technology is driving an increase in collaborative research and development (R&D) initiatives, which allow companies to combine forces and bring new products into existence that would often, without such collaboration, might not otherwise be developed.

For example, we are increasingly seeing competitors jointly investing in trials of new technology in areas such as battery development and electric vehicles.

Although this type of cooperation increases innovation, it nonetheless raises significant competition law risks. A cartel may occur where competitors or potential competitors are involved and information about suppliers, customers or pricing data is shared. Importantly, if the collaboration involves more than two entities, it requires only two of those entities to be competitors or potential competitors for the entire arrangement to trigger the cartel prohibitions.

Even where there is no risk of competitor involvement, consideration must be given to whether the collaboration will have broader anticompetitive effects on the market – such as others being excluded from access to the technology – as this may trigger the prohibitions against anticompetitive arrangements and concerted practices.

Notwithstanding, it is possible to engage in collaborative R&D without breaking the law. Careful planning of ring fencing measures and information-exchange protocols is required to ensure that the information exchanged between the parties is limited to only what is reasonably necessary in order to achieve the purpose of the collaboration, and any information which allows for a more precise forecast of competitor conduct, or reduces market uncertainty, is kept strictly confidential.

Additionally, protection may be afforded to parties who enter into a formal joint venture. Recognising the important pro-competitive benefits and efficiencies that can be achieved by competitors coordinating certain activities, many competition law regimes provide formal exceptions or otherwise permit exemptions to the information exchange rules to permit lawful joint venture activity. However, these exceptions are complex – they vary between jurisdictions and require careful management – and legal advice should always be sought before any collaboration gets under way.

Dealing (or not dealing) with certain suppliers for ESG reasons

Often initiatives considered within industry associations, or other collaborative exercises within an industry, focus less on cost and more on identifying desirable supply chain arrangements, or benchmarking supplier qualities and standards. This practice is likely to become increasingly common as companies seek to learn from their counterparts about suppliers who can help them achieve their ESG goals, particularly in light of the substantial disruption to supply chains around the world due to the COVID-19 pandemic and subsequent geopolitical unrest.

A key competition law risk that can arise from this sort of information exchange or collaboration is one of “collective boycotts” or “buy-side cartels”, where competitors agree not to deal with certain suppliers, or to deal with them on a limited basis only. Even where such a decision is based on legitimate ESG-related concerns, and is one that a company could make unilaterally without competition law risk, this becomes a material risk as soon as two or more competitors discuss it collectively.





By way of example, evidence of forced labour practices in the production of goods in the Xinjiang Uyghur Autonomous Region (XUAR) of China has gained widespread notoriety. Producing approximately 45% of the world's supply of solar-grade polysilicon, the key ingredient for the manufacture of solar panels, the XUAR has put the renewables sector in the spotlight due to serious concerns about modern slavery, highlighting the potential risks a company transitioning to renewables may face within its supply chain.

The United States considers the modern slavery risk so great that, on 23 December 2021, President Biden signed into law the Uyghur Forced Labor Prevention Act (UFLPA), effectively prohibiting the import of goods produced in or connected to the XUAR. This is just one example of the wider regulatory shift which requires companies to increasingly manage ESG risks in their supply chain.

Although legislators may enforce what amounts to a collective boycott of suppliers that fail to meet ESG standards, competition law will prevent a collective arrangement between competing companies from doing the same on the basis that it reduces competition by restricting choice in the acquisition of goods or services, unless such arrangement is specifically authorised by a competition regulator or a separate law addressing the issue. Therefore, proponents of renewable projects requiring solar panels in countries without an equivalent to the UFLPA cannot safely agree among themselves not to deal with suppliers located in the XUAR, even if doing so would provide each of them with comfort that they would not be undercut by competing projects that choose to take the risk on the cheaper XUAR products.

This demonstrates that, in balancing the rush towards renewable energy consumption with rising due diligence obligations, companies must not forget competition law and that, despite all good intentions, any collective action in this space should be taken only with prior legal advice.

Collective procurement

Collective procurement in the ESG space is also on the rise, as companies seek to implement effective measures to address their climate change impact throughout the supply chain.

One such measure gaining popularity is the collective procurement of renewable electricity, which benefits both suppliers and acquirers. For example, in using a single Power Purchase Agreement contract to supply multiple entities, the supplier reduces contract administration costs by dealing with only one collective entity instead of multiple parties, while securing a high volume of offtake often needed to underwrite large renewable projects. In turn, acquirers gain increased certainty of project completion and subsequent electricity supply, and/or the supply of "green certificates" or similar environmental credits to assist with their net zero ambitions, both of which provide added confidence in meeting objectives such as renewable energy targets.

Notwithstanding, collective procurement may raise significant competition law risks. Although, supply-side cartels more commonly attract regulator scrutiny (as they are usually considered more damaging to consumers), companies must remember that a cartel can also arise in respect of their procurement activities (ie the buy-side).

While some limited exceptions can apply depending on the jurisdiction (eg the collective acquisition exception in Australia), it is important that companies structure collective arrangements appropriately to avoid any breach.

In jurisdictions offering an authorisation mechanism, such as Australia and New Zealand, collective procurement initiatives are commonly authorised on the basis that, despite being a technical breach of the cartel rules, they bring material public benefits. However, as most other regimes do not have an authorisation mechanism, legal advice should be sought.

GREENWASHING IN THE RISING TREND OF "GREEN" CLAIMS

A company's response to ESG issues has become critical to business reputation and success. As ESG commitments become ever more important to consumers and investors, it is expected that everyone, including corporates, play their part. Thus, a positive relationship between a company's response to ESG factors and its reputation has emerged, with the strength of response reflected in the degree to which people admire, trust and respect a company.

This has not gone unnoticed in the corporate world, with companies increasingly making public climate pledges, committing to a net zero strategy, or using ESG as a central part of their advertising campaigns. As the Australian regulator notes, "in the world of marketing, green is the new black", and companies are doing everything they can to publicise their good efforts.

However, rising concern that efforts may not always be as "good" as a company makes out has caught the eye of regulators and consumers alike, with the ubiquity of green claims creating increased public scepticism as to the sincerity of the private sector.

Indeed, the tendency to cloud the distinction between genuine green credentials and opportunism is sufficiently notorious to attract its own term – "greenwashing" – which refers to the promotion of a company's practices, products or services as more sustainable or environmentally beneficial than they actually are.

Greenwashing may be intentional, for example to attract investors, or accidental, where a product does not perform as well as a company expected or promised. However, regardless of the cause, it is damaging as it can mislead consumers, breach investors' trust, and distort competition.

While there is no legislation specifically addressing greenwashing, those involved in unsubstantiated ESG claims may contravene general consumer laws which prohibit

misleading and deceptive conduct,⁵ along with false and misleading representations about goods or services.⁶ Additionally, action may be brought under the relevant financial and corporate laws where the conduct or representations relate to financial products or services and/or are connected to corporate disclosure obligations.⁷

To avoid this, companies should:

- Ensure claims made about a product can be substantiated;
- Avoid broad or unqualified claims and representations;
- Ensure claims are specific; and
- Ensure claims are made in plain language.

Notably, greenwashing can land a company in significant legal trouble, with 2021 seeing a rise in competition regulators instituting proceedings against companies in a crackdown on "green claims".⁸

Claims can also attract private action: in August 2021, the Australasian Centre for Corporate Responsibility sued Australian oil and gas company Santos Ltd over statements made in its 2020 Annual Report.⁹

The case is the world's first to challenge the veracity of a company's net zero emissions target, the viability of carbon capture and storage, and the environmental impacts of blue hydrogen. It currently remains before the courts, and serves as a reminder of the attention attracted by green claims.

⁵ For example, in Australia, action for misleading and deceptive conduct may be brought under the Competition and Consumer Act 2010 (Cth) (CCA) Sch 2, s 18.

⁶ CCA Sch 2, s 29.

⁷ The ASIC Act 2001 (Cth) (ASIC Act) and Corporations Act 2001 (Cth) (Corporations Act) contain similar prohibitions in respect of financial products or services. See ASIC Act s 12DA and Corporations Act s 1041H for prohibitions on misleading and deceptive conduct, and ASIC Act s 12DB and Corporations Act s 1041(E) on false or misleading representations.

⁸ For example, in recent years, the ACCC has commenced a number of proceedings concerning environmental claims relating to consumer products. These include: ACCC v Volkswagen (misleading claims regarding diesel emissions resulting in a \$125 million fine); ACCC v Woolworths (alleged misleading claims regarding biodegradable and compostable picnic products); ACCC v Kimberly-Clark (alleged misleading claims regarding "flushable" wipes).

⁹ Santos, 2020 Annual Report, published on 18 February 2021 <<https://www.santos.com/wp-content/uploads/2021/02/2020-Annual-Report.pdf>>.



ESG CONSIDERATIONS IN M&A

Merger control policy aims to ensure structural changes to the marketplace do not lead to anticompetitive outcomes. Pressure to transition to sustainable and resilient infrastructure is forcing unprecedented uptake of renewables, clean energy solutions and other new technologies, as stakeholders pivot away from carbon-intensive assets or seek to buy into businesses that can help offset their carbon emissions. ESG considerations are also now a central consideration for investors, who are increasingly analysing capital allocation through ESG filters and are often willing to invest only in assets that meet global sustainability criteria.¹⁰

This transition has led to substantial volumes of environmental considerations in M&A, along with increased numbers of merger filings, both of which have sparked the interest of regulators. Early signs show that regulators are increasingly interested in ESG considerations in their competition analyses, including for merger control.

While there is yet no settled guidance on how regulators will incorporate ESG factors into merger control policy going forward, recent developments indicate we can expect to see some or all of the following themes emerging:

¹⁰ Research conducted by Ashurst shows that stakeholders consider net zero and climate change among the top three challenges affecting the infrastructure sector. See: "Resilient Infrastructure: Rising to the challenge of a more sustainable future" <<http://globalintranet.firm.ashursts.biz/divisions/Projects-and-Real-Estate/Documents/Ashurst%20Resilient%20Infrastructure%20Report%20-%207%20December%202021.pdf>> at p 8.

greater deal scrutiny for transactions with perceived negative ESG impacts, including because these are more likely to spark complaints from other market participants (even if not strictly on competition law grounds);

new market definitions, such as further segmentation of markets based on ESG factors;

potential state intervention in merger control on ESG grounds; and

perhaps further in the future, in some jurisdictions, environmental damage being considered a theory of harm.

All of these points are likely to result in more complex or longer merger reviews as competition regulators seek to "catch up" with the private sector in understanding how emerging markets (for example, those to do with trading carbon, production of hydrogen or marketing of electric vehicles and related technology) operate, and how they should be assessed from a competition law perspective. History shows that sophisticated competition regulators will readily get across the details of the markets but deal participants should be well prepared and ready for some education as part of their merger notifications, particularly in less-advanced competition regimes.

Further, competition regulators who observe companies making a series of investments in carbon-related industries may be more inclined to scrutinise those deals more loosely due to concerns about "creeping acquisitions", even if on their face none of the transactions appears likely to harm competition. Regulators who

have internal disquiet about whether their own complacency permitted large tech companies to grow relatively unchecked by competition law regulation some years ago will not want to see the same thing happen with first movers in the climate change sector.

Although it is unlikely that ESG factors will change or replace traditional merger control criteria in the absence of specific legislation or regulation, we expect them to play an increasing role in regulators' decisions, at least in jurisdictions in which assessment of public benefits is expressly or implicitly part of the merger control regime.

In the light of this, merging companies should consider ESG factors – like a deal's impact on the environment and jobs – when seeking merger clearance, and ensure that any internal documents addressing these issues are consistent with pro-competitive goals and meeting sustainability objectives.

EXCLUSIVITY OBLIGATIONS

Exclusive dealing is another form of anticompetitive conduct arising in the drive to meet climate change targets. Broadly, an exclusive dealing arrangement involves the supply, or acquisition, of goods or services on the condition that the other party does not acquire, or supply, goods or services from, or to, a competitor or class of competitors.

In most jurisdictions, including Australia, Europe and the US, such an arrangement will be illegal where it has the anticompetitive impact of substantially lessening competition.¹¹ Regardless, conditional supply and acquisition arrangements are often pro-competitive and, in an ESG scenario, potentially critical to furthering sustainability initiatives.

The push towards the production of green hydrogen provides a stark example for the infrastructure sector, which, in order to become carbon neutral, must transition to clean fuel to power both its own assets and operations, and those of others in its supply chains.

Consider: Company A seeks to build a hydrogen plant to further its ESG initiatives; however building the plant is extremely costly – financial analysis has determined that Company A needs to secure a minimum of 60% of continuous offtake for ten years for the project to be financially viable. Thus, to proceed, Company A needs certainty that it will have a long-term purchaser of the hydrogen fuel to, in effect, underwrite the project. To achieve this, Company A enters into a long-term offtake agreement with the buyer, Company B, under which Company A agrees to sell green hydrogen to Company B on the condition that Company B purchase a minimum of 60% of the green hydrogen fuel produced by the hydrogen plant for a term of ten years.

From an ESG perspective, the agreement appears a highly effective means of innovation in, and production of, clean fuel. However, from a competition perspective, the agreement may constitute an illegal exclusive dealing if considered anticompetitive.

Whether it would result in the substantial lessening of competition required to be deemed anticompetitive requires an

¹¹ For example, in Australia exclusive dealing will not constitute a contravention of the law unless it has the purpose, or has or is likely to have the effect, of substantially lessening competition in a market. See section 47(10) of the Competition and Consumer Act 2010 (Cth).

in-depth legal analysis beyond the scope of this article, and will ultimately depend on the particular circumstances of the case; however the example illustrates the difficulty competition law may cause for investment in new and costly technologies, which are yet to achieve the economies of scale required to make their uptake cost-competitive.

COMPETITION BETWEEN STATES

Finally, an emerging point for all infrastructure (and other) businesses to consider is the impact that governments' climate change and net zero policies are likely to have on competitive dynamics within private sector industries that operate in multiple jurisdictions around the world. For example, a country that legislates stricter environmental policies in order to meet its net zero ambitions and timeline will likely be imposing additional costs on companies operating within its jurisdiction that need to comply with those standards. Companies who operate in other jurisdictions without equivalent standards will have lower operating costs to operate and, absent any other intervention, will be able to offer cheaper products and undercut their competitors in the first country. This may in turn create further pressures to collaborate and give rise to the other risks discussed in this article.

Some jurisdictions that are leading the drive for net zero policies are considering, in parallel with these policies, mitigation measures to address the impact on cross-border trade. For example, the Cross Border Adjustment Mechanism (CBAM), which is being introduced in the EU, is designed to ensure that EU importers of goods pay a price for their carbon emissions that is comparable to the price paid by EU domestic producers under the EU Emissions Trading System (EU ETS).

CONCLUSION

The race to net zero is on and the transition to a sustainable and resilient infrastructure sector is key. Commercial imperatives abound as global calls for climate action continue to grow in volume and intensity.

Despite inherent risks and limitations, the sector should recognise that it has an exciting opportunity to use contractual provisions to both reduce its carbon footprint and strengthen its wider ESG performance. Effective advertising and reporting of such efforts can also lead to enhanced reputation and financial results.

However, among all the excitement on entering this new world of ESG risk and opportunity, companies must remember that competition and consumer law compliance cannot fall behind in the race to net zero.



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German Chemical Parks:

opportunities, challenges and Trends for investors

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Chemical parks in Germany have become an interesting investment opportunity in recent years, but they are yet to receive the full focus of infrastructure investors. Thanks to their long production history, the long-term site users and highly professional park operators, who are responsible for site management, chemical parks offer stable production conditions and infrastructure-like cash flows. Park operators offer a comprehensive range of site services and reliable infrastructure for chemical production companies, resulting in a high level of customer satisfaction and long customer relationships.

While chemical parks are used by chemical companies' site users they are also attractive to a number of other tenants from different sectors (particularly services). When it comes to site selection, Germany has an advantage due to its central geographical location and very good infrastructure. A set of challenges chemical park operators must meet are to do with the increased and more complex requirements of globally operating chemical companies as they reduce costs and address sustainability issues. The sale of the large park operator Currenta and three sites by Bayer and Lanxess in 2019 has brought movement into the market and further park operators (eg Infrareal and sites operated by Dow Chemicals) have been put up for sale since then. This trend offers new opportunities for investors. The following article examines some of the opportunities, challenges and trends for investors in chemical parks.

BACKGROUND OF CHEMICAL PARKS

The concept of chemical parks in Germany developed in the 1990s. Originally, chemical parks were used and operated by only one or a few large chemical companies that owned all the various production facilities on a chemical site and the park infrastructure was operated by that chemical company or group of companies. Since the 1990s, however, chemical parks have diversified as new users come to the sites. In that transformation process, former single-user parks became multi-user parks. As a result the park operators had to deal with and provide infrastructure and service operations to a number of different chemicals companies using the site. To manage the risks associated with operations, also including potential environmental liability due to historic site contaminations, the original owners began to outsource logistics and utility services, thus giving rise to new types of service providers, the so-called chemical park operators. Self-contained parks with site users on

the one hand and independent park operating companies on the other came into existence in the German chemical industry.

Today, chemical parks are businesses combining chemical manufacturers, raw material and utility suppliers, including in particular electricity, steam and gas, waste, and other infrastructure, as well as service providers and logistics network services. Except for chemical manufacturing these businesses are usually offered by the park operator in an efficient and effective manner to meet the needs of the chemical companies as park users.

STRUCTURE AND STANDARD REQUIREMENTS OF CHEMICAL PARKS

Chemical parks usually offer through the park operator a comprehensive range of products and services tailored to the specific needs of chemical production companies as park users.

Provision of Services

Central to the park operator concept are the chemical-specific infrastructure and services provided as independent professional site services by the park operator. Services such as wastewater treatment, thermal treatment of production residue, emergency services, industrial safety, environmental services, analysis and testing services, rail dispatching, and product storage are usually available at chemical parks. Chemical park operators will also support chemical companies using the park with a

number of investment planning and construction services, including permit applications. Due to the park operators' long-standing relationships and cooperation with public authorities, they can support new park users with permit procedures from the very beginning. The park operators are generally also responsible for emergency and safety management, including the fire department (either through their own fire brigade or an arrangement with a local fire brigade, provided that strict reaction times can be kept to). This also includes monitoring and compliance with relevant environmental laws, and in particular the management of historic site contamination which usually exists at the sites due to their long operating history often dating back to before WWII.

Power and Steam Supply

A reliable and competitively priced power supply is a key element in the operation of a chemical park. Chemical parks are safeguarded by the provision of several [redundant - word use query] supply lines. Most chemical parks operate their own onsite power plants to secure the supply. The same applies to the uninterrupted supply of steam.

Infrastructure

A chemical park must have excellent logistics networks, ie good connections from road and rail to waterways and pipelines. Nowadays, major chemical parks are interconnected through an advanced network of pipelines transporting raw materials.

OPPORTUNITIES

Chemical production sites outside of chemical parks are rarely permitted in Germany. Their establishment would require long lead times. Chemical production companies prefer to locate in chemical parks where the specific infrastructure and services are offered as independent and professional site services by the park operator. Another advantage is that costs for infrastructure and services are shared between the various park users, thus enabling competitive cost structures. With the offerings of the park operating companies through the entire chain of supporting tasks the chemical production companies can fully concentrate on their production and become more efficient.

Services by the park operator are usually provided on the basis of long-term contracts with stable, asset-backed cash flows which is one of the main drivers for infrastructure investors in park operators. In addition chemical parks are open to tenants along the entire chemical value chain, from raw material producers to processors and finishers to manufacturers of end products. Last but not least, thanks to Germany's advantageous geographical location in Europe, German chemical parks are attractive from a logistics and transport perspective.

Strong commitment of park users

Chemical parks are used on the basis of lease agreements between the park operator and the site users. Due to zoning restrictions and, in many cases, special integrated and rather rare park facilities (such as, eg coker facilities), site users are often tied to a park resulting in a strong commitment of site users to the chemical park. Long-term contracts offer a long planning horizon and a stable business model for the park operators. Typically, site use agreements are for ten-year periods or longer.

Diverse types and groups of tenants

The potential tenants in a chemical park are not necessarily only players the chemical industry[?]. Chemical parks are open to all companies along the entire chemical value chain from raw material producers, processors and finishers to manufacturers of end products. In addition to the chemical industry, chemical parks offer opportunities for other industries. The combination of a safe production environment and a highly qualified services and workforce also makes the site very attractive to companies from areas such as alternative energies, electromobility, green chemistry, polymer electronics, recycling, storage technologies, structural materials and water technologies. By outsourcing lower level business processes to service providers in the park companies can redesign their business models and focus on their core competencies.

Location advantage of chemical parks in Germany

Chemical parks in Germany benefit from logistics networks ranging from road and rail to waterways and pipelines with Germany being an important crossing for other European transport. Germany is located in the heart of Europe, and the short distance to Central and Eastern European countries of the European Union opens up many sales opportunities.

Many German chemical parks are interconnected, supplied with raw materials through a network of pipelines. A well-developed pipeline network makes investments attractive for the chemical supply sector since [site-internal ?]pipeline systems enable highly efficient logistics.

CHALLENGES

Chemical park operators face certain challenges. Park operators must meet the increasing and more complex demands of globally active chemical companies. Moreover, securing a reliable and competitive utility supply at stable prices is crucial for the production of chemicals at chemical parks. In addition, globalisation is leading to increased competition between chemical parks as they seek to attract international investors.

Investment in new service demands

Chemical park operators must meet the increased and complex requirements of global chemical companies. The basic prerequisite for future competitiveness is an infrastructure that is geared to a comprehensive and customer-oriented service portfolio. Site operations must be organised in a flexible and cost-efficient way. Operational excellence in park operations is crucial and the park operators have to continuously align with the key investment criteria of global chemical producers. This requires continuous capital expenditures in the park infrastructure. Otherwise, plant closures or relocations might result in the triggering of domino effects not only for downstream products but the entire production chain and site users.

Energy costs

One of the biggest challenges chemical parks are currently facing involves the rising energy costs with regards to the usually energy-intensive companies in chemical parks. The companies at chemical parks depend on reliable electricity supplies at competitive prices. Supply uncertainties and future cost increases are very likely to have an immediate effect on the company's production. The same applies for more stringent regulation which makes the companies inflexible. The energy intense production in Germany is burdened by higher energy costs compared with many competitors abroad, also caused by the energy transition pushed by the German government, the European emission trading system (ETS) and national energy taxation. In order to achieve the ambitious climate targets, it is likely that energy costs will continue to rise even further in the near future. The costs of grid expansion, the necessary reserve power plants, energy storage systems and the further expansion of renewable energies will have to be borne by the consumers.

Regulatory statutes in the field of environmental protection

Chemical companies as well as park operators have to undertake significant efforts to cope with the increasing standards for environmental protection. These provisions affect in particular emission control regulations for exhaust air and noise, waste disposal, historic contamination and waste water treatment.

German law contains strict and far-reaching liability regimes for violations of environmental laws and the park operators as responsible parties for the operation of the park infrastructure will often times be the subject of authority action. Heavy fines and environmental remediation action can be the consequence, next to negative publicity in case of accidents. In serious cases an immediate halt to production processes can be enforced to prevent further damage.



Contamination risk

Investors in chemical park operators will need to be aware of these potential environmental liabilities, and should diligently assess potential risk areas before making an investment decision. Furthermore investors need to be aware of historic contamination issues existing at many of the chemical park sites, and which often date back to the time even before WWII, when many of the German chemical park sites were first used. In fact, one of the reasons the original site users created the park operators was to shift liability for historic contamination to the park operators who nowadays usually manage historic contamination at the sites centrally [towards the authorities for all site users?].

Contractual arrangements between site users and park operator are therefore particularly relevant in this regard and need to be carefully reviewed. It should also be noted that even though the contamination situation will often be known to a large degree, unknown contamination may still arise and it may be difficult to allocate "new" contamination to certain users. Thus, the liability regime for environmental contamination in a share purchase agreement for a park operator is typically a point of detailed discussion.

Globalisation

As a chemical producer Germany faces a number of challenges. The competitive disadvantage caused by high energy prices (oil, gas and electricity) compared to the USA, the Middle East and also a number of emerging markets has been addressed above. Chemical companies in Germany and the EU must comply with regulations regarding European emissions trading which has strict benchmarks for installations and emission reduction requirements. As long as there are no comparable efforts in the energy and climate policies worldwide, competitive disadvantages could be overcome by relief or exemption of chemical companies from certain restrictions, thus ensuring the continued use of German chemical park sites and site services provided by park operators.

OUTLOOK

The German chemical park operator concept offers attractive investment opportunities. Chemical parks allow the production of a large range of chemical products on one site - from basic commodity chemicals to high-value specialty chemical products. For small chemical companies, including start-ups, chemical parks offer with their full service and supply approach an ideal environment for their business. However, continuous investments in the park infrastructure will be required in the future to maintain a modern, competitive, and interconnected production base for chemicals, and the transition to renewable energies and availability of conventional energy sources will continue to play a central role for park operators.



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Building a Better America with progressive contracting models - Five guiding principles for implementation

Co-authors: Andrew Smith & Tristan Robinson

INTRODUCTION

State DOTs and other government agencies in the US are showing a steadily increasing interest in "progressive" delivery models, and several recent megaprojects have adopted this model for their delivery, including in transit (the Sepulveda Pass Transit Corridor and the San Jose Airport Connector), highways (the I-495/I-95 Capital Beltway), and social infrastructure (the Potrero Bus Yard Modernization).

There are numerous progressive delivery models, such as construction manager at risk ("CMAR"), construction manager/general contractor ("CM/GC"), pre-development agreements, progressive design-build and progressive P3. Fundamentally, progressive contracting seeks to drive a benefit from (i) engaging contractors earlier than is typical under fixed-price contracting (i.e., during project development) in order to allow for collaboration between the owner and contractor to properly identify, understand, manage and mitigate project risks and challenges before pricing is agreed; and (ii) fix the price for the performance of construction work later than is typical under fixed-price contracting (i.e., after contract award), once the risks and challenges are identified, better understood and can be managed and mitigated – and therefore more reliably priced. These features are foundational to the progressive contracting model, and seek to reduce uncertainty with respect to project risk, which in turn should lead to more reliable pricing and less claims and cost and schedule overruns.

1. For convenience, we use the term "contractor" throughout this article to refer to the counterparty to the project owner under a progressive contract, but depending on the type of progressive contracting model this counterparty could be better described as a "developer" or some other entity.

The use of progressive contracting is not new and has been used in other markets for years, but until recently was less frequently considered for use on US public transportation projects.

This article explains:

- (i) the key elements of the "typical" progressive contracting model;
- (ii) key reasons why a project owner might consider utilizing a progressive contracting model for project delivery; and
- (iii) "guiding principles" for project owners to consider so as to implement progressive contracting successfully.

KEY ELEMENTS OF A "TYPICAL" PROGRESSIVE CONTRACTING MODEL

How does progressive contracting typically work?

Progressive contracting is an umbrella term we use to describe contracting models that engage a contractor to work collaboratively with the project owner before a price for construction is fixed so that pricing is done with better knowledge

and understanding of the project. For the purpose of providing a simple frame of reference, we describe below what we consider to be a fairly "typical" structure for a progressive contract. However, the terms of progressive contracts vary considerably and some projects take a significantly different approach from that described here.

Under a "typical" progressive contracting model, a contractor is selected through a competitive solicitation that is evaluated on a qualifications-only basis or qualifications plus an aspect of price (e.g. preconstruction phase costs, management fee, equity return/profit or margin percentage). Therefore, procurement and selection of a contractor is typically completed relatively quickly.

Following contractor selection, the contractor enters into an arrangement to work collaboratively with the project owner during two phases:

1. **Phase 1 - the preconstruction phase.** This phase is for the development of the project, including the resolution of key scope and risk issues. Activities during this phase can include:

project planning, scope definition, feasibility analysis, public/stakeholder engagement, assistance with environmental permitting and other approvals, design development, risk mitigation, preparation of contract documents and specifications for construction, and potentially early construction works. Some projects also split this phase into a separate planning phase that proceeds preconstruction activities, allowing for better sequestration of activities to be performed concurrently with the environmental review and approval process.

2. **Phase 2 - the implementation phase.** This phase is for the implementation of the project and depending on the delivery model utilized may include final design and construction of the project and beyond (e.g., operations and maintenance services).

See **Diagram 1** (illustrating a progressive design-build structure) and **Diagram 2** (illustrating a pre-development agreement structure with project financing for implementation).

DIAGRAM 1 (EXAMPLE OF PROGRESSIVE DESIGN-BUILD STRUCTURE)

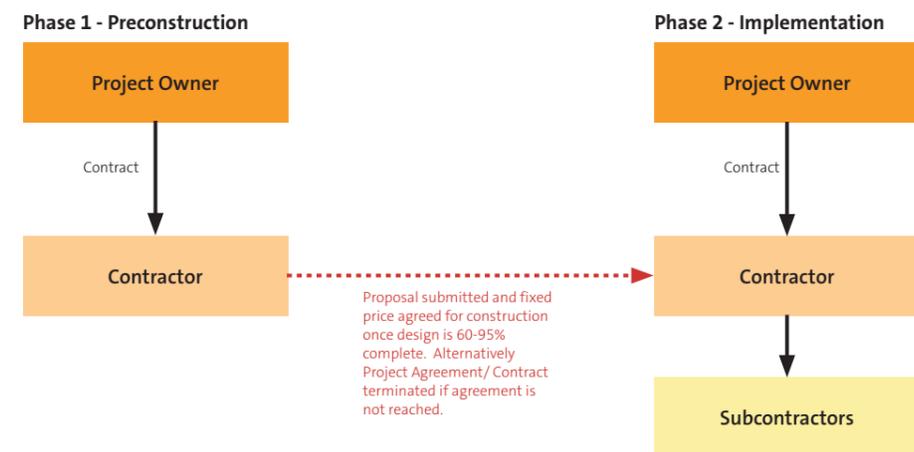
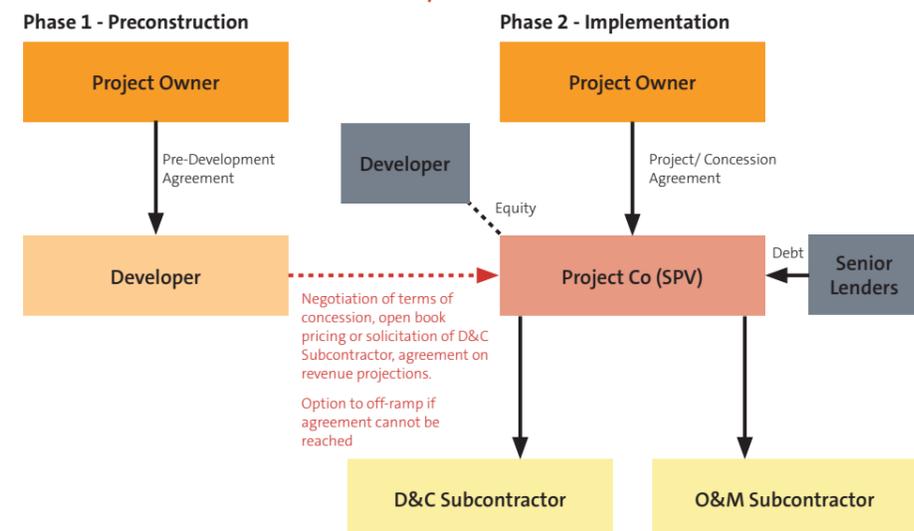


DIAGRAM 2 (EXAMPLE OF PRE-DEVELOPMENT AGREEMENT STRUCTURE WITH PROJECT FINANCING FOR IMPLEMENTATION)



The preconstruction phase typically includes an iterative build-up of the project scope, schedule and cost estimates on a transparent "open book" basis or through the competitive bidding of subcontractors, with the final contract price for the implementation phase established at a later stage of design development (for example, at 60–95% level of design) than is typical for a fixed-price design-build contract (about 15–35% level of design). An important differentiator of progressive contracting is that the price for the implementation phase is established at the point at which the project scope and schedule can be clearly defined and risks are well understood and efficiently allocated so that parties can plan and price the project in a more informed manner. Once this point is reached, the contractor typically submits a proposal to the project owner for the implementation phase with a defined scope, schedule and price for the project owner's acceptance.

If the project owner accepts the contractor's proposal, the contractor completes the project in accordance with the agreed scope, schedule and price. However, if the parties cannot reach agreement on the contractor's proposal, the contract documents typically contemplate one or more "off-ramps" during the preconstruction phase that may be exercised by the project owner to terminate the relationship with the contractor.

If the project owner exercises an "off-ramp": (i) the contractor will not proceed to the implementation phase; (ii) the preconstruction phase will expire; and (iii) the project owner will typically have the right to use the designs and other work product prepared by the contractor during the preconstruction phase in any subsequent re-procurement for project implementation (i.e., the project owner may pursue re-procurement of the implementation phase separately).

Payment terms during the preconstruction phase vary significantly and it is difficult to define what is "typical", but usually the project owner will make payments to the contractor during the preconstruction phase on either a service agreement or a milestone payment basis; and it is not uncommon for some preconstruction costs to be carried by the contractor at risk until a fixed price is agreed and the implementation phase begins.

In summary, a "typical" progressive contracting model allows for:

- Earlier identification by the parties of scope, schedule and cost challenges, and an opportunity to identify, understand, manage and mitigate "unknown" risks. This occurs before the parties commit to a price for the implementation phase. The information that is gathered by the parties during the preconstruction phase can reduce guesswork and improve decision-making, allow for efficient allocation and management of project risks and thereby improve certainty and predictability with respect to project implementation. For example, with respect to the risk of design approvals by third parties having jurisdiction over the project, this model allows for the contractor to engage with such third parties during development of the design to address their concerns before fixing the price and the schedule for construction.
- Later identification of the price for the implementation phase. This occurs after front-end due diligence by the contractor during the preconstruction phase and at a point in time when "unknowns" may be identified and understood, and can be more reliably priced, as informed by the contractor's work during the preconstruction phase. This can help reduce the contractor's risk premium and contingencies in the pricing of the implementation phase, resulting in better value for

money for the project owner. It can also help reduce the risk of unforeseen costs by way of change orders and claims during project implementation. In short, progressive contracting allows for informed discussions between the parties on cost drivers and value trade-offs.

KEY REASONS TO USE (OR NOT USE) A PROGRESSIVE CONTRACTING MODEL

When to use progressive contracting?

A project owner might consider utilizing a progressive contracting model where one or more of the following conditions exist:

- Where contractors have shown a loss of appetite to accept or aggressively price difficult risks on a fixed-price basis and are more selective in the projects they pursue and contracting models they agree to – a trend that could continue in the current environment of high inflation, unpredictability in supply chains and a tight labor market. In this scenario, a project owner may get better participation from the contractor market if the project owner adopts a progressive contracting model. The 'sunk cost' procurement risk for contractors may also be lower under a progressive contracting model given that such procurements are typically shorter in duration and cheaper to bid than a fixed price "hard bid" procurement. This may also encourage better participation from the contractor market.
- Where the scope of work for the project cannot be priced accurately upfront (i) because the proposed scope is variable or uncertain; or (ii) due to complex design, schedule, sequencing, buildability or technology issues, or other issues that may not be well understood at the time of bid. Here, contractors may perceive that they are being asked to take on an unquantifiable risk if they are asked to price the project implementation work upfront, or the project owner will be required to take on a risk that it cannot control. In this scenario, as explained above, progressive contracting may allow for risks to be considered and managed in a collaborative manner and be well understood by the parties prior to pricing being fixed. For example, overstated development projects that include the development of housing (including affordable housing) and/or commercial or retail on top of a transit station or other facility may include complex schedule, sequencing and buildability issues, including with respect to the timing and availability of public funding sources, which could benefit from collaboration between the public owner and contractor at an early stage and throughout project development. Also, progressive contracting aligns well with projects that involve systems engineering for emerging technology, where iterative design and testing is required to get to project implementation.
- Where the time for delivery is paramount. Progressive contracting can accelerate project development by allowing for planning, procurement, environmental/permitting and development activities to occur in parallel. Fixed-price bids require the project to be "ready" to bid, with the owner having already largely defined the project scope, schedule and risks; whereas this level of definition may not be needed for the procurement of a contractor under a progressive contracting model, given that the preconstruction phase work to be performed by the contractor will inform the definition of scope, schedule and risk.

Progressive contracting can also accelerate the construction of a project by including the collaborative identification of discrete early works packages as part of the preconstruction scope of work (often as part of the risk management process or with a view to optimizing the implementation phase construction schedule), and performance of those early works during the preconstruction phase. Early works may also include the procurement of long lead-time items during the preconstruction phase.

In addition, innovations and construction efficiencies to accelerate delivery of the implementation phase can be identified early and contractualized during the preconstruction phase.

- Where it is important for project owners/stakeholders to retain input and control over project outcomes before price and schedule have been fixed. The collaborative nature of progressive contracting, including the iterative build-up of project scope, schedule and cost estimates, allows significant opportunities for project owner input and control throughout, including, for example, preliminary screening of different alternatives and during the preparation of a proposal for the implementation phase. This feature is an important differentiator from some other forms of fixed-price contracting, where bids are developed based on a static set of specifications without the project owner's ongoing input and feedback, and are made and accepted on a "take it or leave it" basis.
- Where private sector expertise, knowhow and innovation is required for early project decisions (e.g., with respect to the optimal technology solution, the approach to project risks, or the scope/feasibility/affordability of the project). The information shared by the contractor during the preconstruction phase can be used by the project owner to help it make more informed decisions with respect to project development on a value for money basis. For example, the project owner has visibility of anticipated project costs throughout design development, and may choose to descope some elements to stay within its affordability threshold/project budget.

When not to use progressive contracting?

A progressive contracting model may not be the right model for:

- straightforward, routine or repetitive projects, where scope and risk are well understood;
- projects that do not require unusual or extensive planning; and
- projects that do not require detailed design to be priced accurately, or where the design is able to be fully developed with a clear and straightforward scope.

Also, if a project involves a concession or revenue to the private sector, then revenue projections may be very difficult to "negotiate" on a "open book" basis. A project owner may be able to drive better value from a revenue stream in a competitive bidding environment.



FIVE GUIDING PRINCIPLES FOR SUCCESSFUL IMPLEMENTATION OF A PROGRESSIVE CONTRACTING MODEL

If the project is a good fit for progressive contracting, project owners should consider these five guiding principles when crafting and implementing a progressive contracting model for project delivery:

1. Ensure reasonable certainty of a deliverable project

Progressive contracting should not be used as a "fishing expedition" to try and engage the private sector to kick-start a difficult project with many unknowns. This is because, given the significant resource commitment required to bid on a project and engage in preconstruction activities, prospective contractors may condition their pursuit of a project on the project owner being able to demonstrate that the preconditions exist for a deliverable project that has a high likelihood of successful implementation. Further, engaging a contractor too early in the project development process before they can really add value may be confusing and not benefit anyone.

As a general rule, prospective contractors may look for the following preconditions to exist before bidding on a project:

 - (i) A level of political support for the project and an active project champion who will remain in office through project implementation.
 - (ii) Identification of a reasonably certain funding source for the project or a credible forecast of project revenues (although for some projects the contractor may be willing to help the owner identify viable funding sources as part of the scope of work for the preconstruction phase).
 - (iii) Project owner buy-in for a "progressive" approach to project delivery. Often a significant hurdle here is ensuring that stakeholders who are used to fixed-price contracting are accepting of a model that fixes the price of project implementation outside of the RFP stage.
 - (iv) The project owner's capacity and capability to deliver the project. Progressive contracting requires a depth of project owner resource – both staff time and financial resources - because the project owner needs to work collaboratively with the contractor throughout the preconstruction phase.
 - (v) A governance structure that accommodates progressive contracting, ideally allowing for: delegation of authority, clear lines of communication and decision-making authority, streamlined information transfer and cross-pollination of ideas, prompt issue resolution, and alignment of objectives.
 - (vi) Legal authority to deliver the project under a progressive contract.
2. Maximize opportunities for optimization of project risk management on a value for money basis
 - (i) Risk allocation has significant implications for contractors (and other project stakeholders including, if applicable, equity and debt financiers).

The preconstruction phase provides an opportunity for project risks to be identified, further defined, understood, mitigated and/or managed, and not simply "allocated". Mitigating and/or managing these risks during the preconstruction phase allows for the parties to better understand and predict the project scope, schedule and price for the implementation phase. This allows for better decision-making. Some mechanisms to understand, mitigate and/or manage risk are listed below. These mechanisms should be considered by project owners for inclusion in the contractor's scope of work for the preconstruction phase:

- Preconstruction site investigations and surveys
- Assistance with the project owner's coordination of right-of-way acquisition, including identification of any additional land required for the project
- Active engagement with third parties, permitting agencies and utilities with necessary design development to facilitate this
- Involvement in the community or stakeholder engagement processes surrounding the project
- Development of the design to a prescribed level
- Contractor proposals for risk mitigation during the pre-construction phase
- Review and preparation of a written evaluation of project risk allocation or risk register with a recommendation for various approaches to such allocation and compensation mechanisms for unavoidable risks so as to achieve value for money and minimize risk contingencies in pricing the implementation phase work. A risk register can also allow for better identification, mitigation and management of important key risks that are project-specific (as opposed to generic).
- Value engineering proposals to optimize project scope and budget
- Integration of design development with construction planning at an early stage, including a review of requirements for the implementation phase to clarify uncertain, unnecessary or inadequate scope or construction requirements. This could include recommendations for the construction schedule and phasing, staging and temporary work, traffic management, minimizing construction impacts, and interfacing contractors and projects. This can help to optimize construction efficiencies and drive value.

3. Consider reimbursing preconstruction scope costs
 - (i) Project owners may believe that contractors will be willing to finance the cost of performing preconstruction phase work, thereby simplifying the project owner's approval process and deferring its obligation to fund the project. However, this is rarely true.
 - (ii) It is most common for contractors to be reimbursed by the project owner for all or some of their costs for preconstruction services on a periodic or milestone basis during preconstruction.

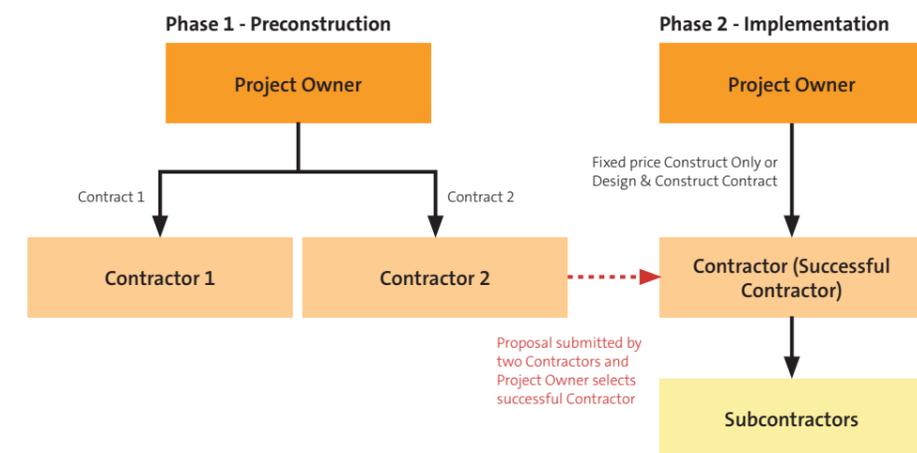
- (iii) However, some projects may be able to take a different approach to preconstruction cost reimbursement, by deferring all or part of the reimbursement to the implementation phase. Contractors are most likely to be willing to take some level of risk around preconstruction costs on (i) projects involving new technology where the contractor has a development budget towards implementing the project; and/or (ii) concession or revenue risk projects with an opportunity for significant financial reward or upside during the implementation phase. Project owners should note that contractors will generally be very incentivized to reach the implementation phase, even without having an element of their costs at risk. This is because they will view the project as a failure if they do not get to the implementation phase given that the fees that they generate from project development are usually not their core business, and their opportunity for revenue and profit may be highest for the implementation phase.
- (iv) For some projects, it may be that the cost of performing the preconstruction phase work can be included as a bid item during the solicitation so as to maximize competitive tension among the bidder pool and drive value for money for the owner with respect to the pricing of such work. For example Maryland DOT is delivering its I-495/I-270 P3 program through a progressive P3, and it required proposers to bid a price cap for their preconstruction services, which was evaluated as part of the selection process.

4. Apply mechanisms to mitigate a perceived lack of competitive tension in establishing the price for project implementation

Project owners may be concerned that the technical solution, commercial terms, risk allocation, and price for project implementation are negotiated with the contractor during the preconstruction phase with a perceived lack of competitive tension from other bidders. However, there are mechanisms that project owners can implement to address this concern:

 - (i) Appoint two contractors to separately perform the preconstruction phase work – the proposal for the implementation phase can then reflect technical and price competition between these two contractors. See **Diagram 3**, which illustrates this model. For example, the Los Angeles County Metropolitan Transportation Authority ("LA Metro") adopted this mechanism for the Sepulveda Transit Corridor Project, contracting with two separate contractors to perform preconstruction phase work, each with a different transit mode (LA Metro did not specify a required transit mode, alignment or configuration in the original solicitation). When LA Metro selects a locally preferred alternative for the project, it can elect to continue to proceed with one contractor if its proposal for project implementation is consistent with the locally preferred alternative, and the contract with the second contractor will expire.
 - (ii) "Price anchors" that are competitively bid by contractors during the RFP stage. These "price anchors" may include, for example: a competitively bid fee, equity return/profit,

DIAGRAM 3 (EXAMPLE OF DUAL-CONTRACTOR APPROACH DURING PRECONSTRUCTION PHASE)





administration of a fixed-price contract. This needs to be reflected in the governance structure to monitor and manage the contracting process. This should look like a partnering approach between the project owner and the contractor and may include blended project teams and the colocation of staff.

- (iii) The project owner's standard contract management and administration policies or protocols may also need to be modified for progressive contracting.

CONCLUSION

- Progressive contracting models can be a useful tool for project owners to employ under the right conditions and, when properly understood, can improve the likelihood of project success.
- There will inevitably be some trade-offs that public owners need to consider when deciding whether to use a fixed-price delivery model or a progressive contracting model. For example, there may be a concern from project owners that competitive tension for project implementation is reduced, but engaging a contractor at the preconstruction stage may also reduce the private sector's perception of risk associated with the project and increase its willingness to bid. Progressive contracting likely requires an additional commitment of time and resources by the public owner early in the project development process, but it has the potential to produce a better defined and more financially feasible project.
- The five guiding principles set out in this article can help project owners achieve the successful implementation of well-crafted progressive contracting by: (1) ensuring reasonable certainty of a deliverable project; (2) maximizing opportunities for optimization of project risk management during the preconstruction phase to drive value; (3) carefully considering preconstruction scope costs to correctly incentive the contractor; (4) applying mechanisms to mitigate a perceived lack of competitive tension in pricing project implementation; and (5) aligning project owner culture and contract management and administration.
- Ashurst has advised public owners on numerous progressive contracting projects across the US and internationally, including Maryland DOT, LA Metro, the City of San José, and San Bernardino County.

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or margin percentage for the work to be performed during the implementation phase. "Price anchors" are committed prices and are not renegotiated in the build-up of the construction price for the implementation phase.

- (iii) Include in the scope of work for the preconstruction phase an iterative build-up of the design, schedule and price with multiple milestones or "validation points" in order to compare those prices against an independent cost estimate or benchmarks with an ability for the project owner to exercise its right to "off-ramp" if value for money is not being achieved. Both the "validation points" and the "off-ramps" will need to be clearly defined and objective. We note that the viability of "off-ramps" will depend on the project owner's view on the cost and schedule impacts of the delay caused by a re-procurement after exercising the off-ramp. The viability of off-ramps will be improved where two contractors are appointed to perform the preconstruction phase work (as referred to above) or where the owner is in a position to quickly re-procure the implementation phase scope.
- (iv) Transparent "open book" cost estimating to develop pricing for the implementation phase. If the project owner does not have experience in "open book" estimating, it may be concerned about its ability to successfully negotiate a price for the implementation phase on an "open book" basis vis-à-vis a more

sophisticated or experienced contractor. This can be mitigated by requiring an agreed upon estimating methodology and cost model to be developed upfront and by requiring the contractor to develop a program as part of the preconstruction work for the project owner's approval, to train the project owner's staff on the cost model and related procedures, historical data, categorization of costs, estimating techniques and tools, hardware, software, and any other systems employed by the contractor for cost estimation for the project.

- (v) Use of an independent cost estimator to carry out an independent pricing analysis and validation of the contractor's cost estimate (for example, to avoid "gold-plating" by the contractor), with a mechanism for reconciliation of the independent cost estimator's analysis with the contractor's cost estimate.
- (vi) Benchmarking of prices to similar projects, which requires a sufficient pool of similar projects.
- (vii) Competitive solicitation of subcontractors by the contractor during the preconstruction phase to perform various parts of the scope of the implementation work (see Diagram 2). This should drive value on the parts of the scope that are being priced by multiple prospective subcontractors. It also means the entire subcontractor market should be available because they are not divided among various bidder teams, as they would be during the RFP stage. Therefore, the project owner can get the

most highly qualified team across the full project scope and for all disciplines. For example, for the Potrero Yard Modernization Project, the San Francisco MTA required the lead developer for the project to competitively bid its debt financing, design-build contractor and maintenance provider for project implementation.

- (viii) Include a key terms sheet for the implementation agreement (i.e., DB contract or P3 agreement) in the RFP so that these terms are agreed upon prior to selection and not subject to negotiation later.
- 5 Align project owner culture and contract management and administration
 - (i) The project owner needs to have the willingness and flexibility to employ a new approach to contracting that may be a significant departure and disrupt its typical "business as usual" processes. The project owner should consider whether to implement change management processes for this purpose. Without effective planning and education around a progressive contracting model, the project owner's culture and contract management and administration processes may be difficult to change.
 - (ii) In order to give effect to the collaborative nature of progressive contracting, the project owner will need to focus on establishing clear expectations and goal alignment with the contractor and an approach that is less adversarial than may be customary in the

Infrastructure Industry

Cost escalation in infrastructure projects

Authors: Harvey Weaver, Mark Disney, Yvonne Cross, Sadia McEvoy, Matthew Taylor & Lillian Yeung

INTRODUCTION

The aftermath of Covid 19, the Russian invasion of Ukraine and factors such as the post Brexit fallout and unprecedented weather events in Australia have all contributed to the almost unprecedented levels of cost escalation being experienced globally.

This undoubtedly presents a significant challenge for those procuring infrastructure projects. Around the world, procuring authorities are grappling with how best to deal with escalating prices and situations in which bidders may be refusing to adhere to the kind of fixed price bids so often favoured by authorities looking to secure a price within their budgetary constraints. Bidders themselves are grappling with how to deal with these challenges. The infrastructure procurement market remains 'hot' in many parts of the world, offering numerous opportunities for bidders but the inflationary pressures and the constant state of flux in supply chain costs are posing challenges for bidding strategies. Bidders want to remain competitive while at the same time protecting themselves and their supply chains in an inflationary market in which many suppliers are struggling to hold prices for any significant period of time.

To give some examples of the scale of the challenge:

- **UK:** the Construction Material Price Indices for "All Work" saw a 27.2% increase in the 12 months to May 2022, with the greatest price rises being experienced in concrete reinforcing bars (64.9%), fabricated structural steel (52.7%) and particle boards (30.2%). Construction materials saw no price decreases during this time¹;

- **Australia:** the first three months of 2022 saw a 2.9% increase in building construction prices and overall there has been a 10.1% increase in the past 12 months. The Australian Bureau of Statistics has identified contributing factors to the increase as including the continued investment in infrastructure projects, supply constraints, higher freight costs, skills shortages and strong activity in the residential sector²; and

- **Middle East:** the construction industry has shown no signs of slowing down and demand for construction materials remains high. In 2021 alone, in some parts of Saudi Arabia it is estimated that the price of aluminium, copper and iron ore increased by between 45% and 51% and the price of steel reinforcing bars rose by as much as 46%³.

This article draws on our recent experience in the infrastructure market globally and looks at what solutions are emerging to deal with these issues. It follows on from our report "Resilient Infrastructure – Rising to the challenge of a more sustainable future" where one of the questions we asked was how issues such as climate change, sustainability, technology and Covid 19 would affect the pricing of infrastructure going forward.

As many of the projects we have considered in producing this article are currently in procurement, individual projects have not been named.

A GLOBAL ISSUE

Just like the Covid 19 pandemic, this is a global issue which has no respect for international boundaries. The same kinds of issues are arising in infrastructure procurement around the world, whether it be Australia, the UK, Europe, the Middle East or the US. As a result, as solutions emerge, they are likely to be of general application and we may see common approaches emerging across jurisdictions.

An exacerbating factor is the time frames for delivery that large scale infrastructure projects face. This raises the possibility of cost escalation over what could be a significant period of time, coupled with a desire from procuring authorities to make sure that any protection given should be flexible enough to deal with changing circumstances if inflationary pressures ease and some level of 'normality' returns, whatever that may be.

Over the past few years in a number of jurisdictions, we have seen debate regarding the most appropriate forms of contract for infrastructure procurement as some authorities seek to move away from more 'hard nosed' D&C contracting to more collaborative forms. These range from more flexible forms of D&C contracts with a greater proportion of shared risks to target cost approaches and alliances. While the form of contract can, in part, mitigate the degree of cost exposure from a bidder perspective (and reduce the level of risk contingency bid back to authorities) there is still a need for a degree of price certainty at the outset. This is because there needs to be a baseline against which methodologies, such as pain and gain share, can be measured. Bidders will be reluctant to increase the risk of 'pain' by exposing themselves to unprotected cost escalation. For procuring authorities trying to budget for their infrastructure spend, a move towards a more collaborative style of contracting can make budgeting more difficult (and the contingency provision greater) when compared to a more 'fixed price' approach and is particularly challenging if a project is within a regulatory environment where the key determinant is price. However, this has to be measured against a desire to reduce risk pricing for contingent risks that may never materialise along with general value for money considerations.

THE CURRENT POSITION

Based on our recent experience globally, from both closed deals and on going procurements, there is no consistent pattern as to how the issue of cost escalation is being dealt with. While the issue is constantly raised by bidders, in the majority of cases a solution (if any) will be project specific and driven by a number of factors, such as the nature of the project, which materials will make up the bulk of the construction costs, supply constraints for those materials, the projected construction timeline and the degree of competitive tension.

It is also the case that rhetoric at the bid stage may not always translate into a final bid position as bidders take a view on the competitiveness of their bids and try to achieve the 'sweet spot' between the bid back of contractual terms (where permitted) and overall price. In some cases, bidders have not pursued cost escalation protection and presumably have added an element of contingency to their bid in order to mitigate against the risk (whether this is enough to offer 'real' protection, time will tell). In other cases, bidders have sought widespread protection. Rhetoric at the market sounding stage also needs to be treated with some caution as potential bidders may be more bullish on taking 'fixed price' risk at this early stage (and to help a project come to market) but will be more circumspect later on in the procurement.

From the point of view of a procuring authority, they are understandably reluctant to give protection as a matter of course and therefore set a precedent for future projects. In some jurisdictions there may also be balance sheet considerations for an authority if they take on aspects of this risk. Therefore, if protection is offered, this is generally on a project specific basis where there is a particular justification or exposure.

INTERVENTION AND VOLUNTARY SCHEMES

In some jurisdictions, procuring authorities are taking a front foot approach and are offering bidders a degree of protection against the current inflationary environment.

In Ireland an Inflation Co operation Framework has been developed for those parties engaged under a public works contract⁴. This was introduced in May 2022 with the aim of safeguarding public projects already under construction and to mitigate the significant losses being sustained by contractors. It recognised the effect the exceptional inflation in construction materials and energy is having on public work contracts and also the potential impact this could have on the willingness of contractors to participate in public works contracts that form part of Ireland's National Development Plan. The Framework is voluntary, though parties are being strongly encouraged to participate.

Key features include:

- the back payment of a proportion of inflation related costs (on materials and energy) to 1 January 2022 on those contracts in progress since the beginning of 2022 (50% up front and the remainder apportioned over future payments);
- going forward, recovery for energy/fuel price inflation in addition to some protection for materials (inflation analysis will use the relevant indices published by the Central Statistics Office in Ireland);
- the State bearing 70% of the additional costs arising due to inflation with the remaining 30% being borne by the contractor. This is on the basis that contractors should bear some degree of additional costs in recognition of the original terms on which they tendered, but the majority of the costs

1. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1087494/22-cs7_-_Construction_Building_Materials_-_Commentary_June_2022.pdf

2. <https://www.abs.gov.au/statistics/economy/price-indexes-and-inflation/producer-price-indexes-australia/latestrelease#construction>

3. <https://www.jll-mena.com/en/views/impact-of-price-inflation-on-middle-east-construction-sector>

4. <https://www.gov.ie/en/press-release/a346d-minister-mcgrath-introduces-measures-to-address-the-impact-of-construction-material-price-inflation-on-public-works-projects/>



should be borne by the State. This recognises the limited capacity of contractors to bear these costs, uncertainty as to the duration of the inflationary environment and the fact that the State, as ultimate owner of the asset, is keen to ensure that quality materials are used; and

- contractors not being held liable to pay liquidated damages where it can be shown that supply chain disruption has led to a delay in completing the project.

The latter point is particularly noteworthy as it affords liquidated damages relief to contractors as opposed to being an extension of time entitlement. As the following section demonstrates, while an approach to cost escalation is slowly emerging, the focus has primarily been on cost rather than delay. It will be interesting to see whether this is aimed primarily at smaller contractors on smaller projects who may have less ability to absorb the cost of delay, in particular where this is exacerbated by liquidated damages.

In the UK the Construction Leadership Council (CLC), an industry/government council jointly chaired by the Minister for Business and Industry and an industry appointee set out plans in May 2022 to mitigate the impacts of inflation hitting companies across the sector⁵. The CLC is seeking to co ordinate industry efforts to minimise risk and reduce the impact of inflation where it can. Its plan includes developing market intelligence about risk hotspots, publishing guidance on price inflation indexation and commercial issues, preparing case studies on good practice in response to current inflation and running industry briefings on conflict avoidance. It is also researching long term capacity loss from Ukraine, Russia and Belarus and the impacts on the sector.

As an aside, for a summary of how the three common standard form contracts used for construction and infrastructure projects in the UK – JCT, NEC (commonly used by the UK Government) and FIDIC – address the risks associated with cost escalation arising from unforeseen events, see our article. This article also considers potential recourse in terms of suspension and termination rights, and some of the ways in which these contracts can be drafted for future projects to address the issue of cost escalation.

The US Department of Defence issued Guidance on Inflation and Economic Price Adjustments in May 2022 in recognition of the major inflation challenge faced by government contractors⁶. The Guidance focuses on both existing and new contracts and recognises that where economic price adjustment (EPA) clauses

are contained in contracts then these will apply according to their terms to offer protection, but where, for example, a fixed price contract does not provide the contractor with the benefit of an EPA clause, the risk should remain with the contractor. For new contracts it recommends that where an EPA clause is considered it should focus on the key areas of price escalation, rather than being of general application.

IS A PATTERN EMERGING?

Globally, procuring authorities are understandably reluctant to expose themselves to general cost inflation risk and so there appears to be strong resistance to any kind of blanket protection. Procuring authorities are however conscious of the increasing pressure on global supply chains and recognise the need to consider alternative approaches in light of this. Where we are seeing protection offered, this is usually on a bespoke basis tailored to the particular nature of the project. Themes that are emerging include:

- **Identification of specific commodities/materials:** the need for agreement on which commodities/materials are subject to the greatest level of volatility and which of these are significant in the context of the particular project. Examples include bitumen/asphalt, cement, steel, timber and containers. We are seeing less of a focus on costs such as labour;
- **Indices:** links to specific indices which best track the relevant costs and the application of these indices to adjust particular elements of the contract price only;
- **Caps and collars:** should any pricing protection afforded by a procuring authority only apply once a particular level of escalation has been reached (and likewise any share in the upside of price reductions only apply once a certain level of reduction has occurred)?;
- **Level of protection:** should the level of cost protection provided to a contractor for a particular commodity be less than 100% in order to incentivise the contractor to control costs?;
- **Profit element:** addressing the profit element on any adjusted element. Logic suggests that where the contractor is obtaining the benefit of cost protection any adjustment should be limited to the cost element only (without any additional margin for the contractor on the adjusted element);

- **Volume risk:** in relation to a particular commodity procuring authorities are not generally willing to accept volume risk as it is seen as a risk best controlled by the contractor;
- **Duration of protection:** where some pricing protection is provided then ideally authorities will want to limit this to the period between bid submission and contract close (or financial close, if relevant, given the link to debt sizing and the robustness of the financing package). We have, however, seen projects where protection has been provided until the end of the construction phase (and this is where a lot of the bidders focus remains). In this case it will be particularly important that the authority can benefit from any cost reductions if inflationary pressures subside. The challenge with restricting cost escalation to a period that ends at contract close is that in many cases this may not reflect the bidders subcontracting strategy. Obtaining insights into bidders subcontracting strategy will be important to allow authorities to better consider the period during which adjustments can be made; and
- **Evaluation:** consideration of how best to ensure that any pricing mechanisms that are bid back are properly evaluated in order to ensure a level playing field is maintained.

While protection is generally being considered at a project specific level, many governments are exploring options for positions that could be adopted as a general rule across sectors. We are yet to see a whole of government position taken in the context of the current pricing constraints, but many governments are considering whether price escalation issues should be treated as a whole of government issue with a view to maximising consistency across procuring authorities and mitigating risks of project specific outcomes setting precedent positions. In some markets, such as the Middle East, the issue of protection is taking slightly longer to come to the fore but given the number of procurements in the region this may only be a matter of time.

OTHER FORMS OF MITIGATION

If a procuring authority is not willing to offer any cost protection to bidders then bidders will have to decide whether they wish to pursue the bid and, if so, whether other forms of mitigation are available. One option for bidders is hedging. For example, in a project with a high bitumen content can the bidder protect itself by hedging against the oil price and does it then need to factor in the price of the hedge into its bid? Even if the bidder is able to hedge the risk, the period of time suppliers are able to 'hold' their pricing means that bidders still need to move much quicker than before to 'firm up' pricing. Another consideration is whether the bidder can spread the relevant cost risk over a number of its projects.

If the authority is willing to offer protection to bidders in respect of a particular commodity then it will need to consider whether to put in place mitigation measures itself. Where an authority takes the risk of foreign exchange movement between bid submission and contract close, we have seen foreign exchange hedges taken out in order to mitigate against this exposure. The same could be considered for a particular commodity.

Finally, we are seeing anecdotal evidence that authorities are looking more closely at the impact that government policies

around purchasing requirements may have on prices and access to supply chains, for example, requirements for local content or use of local suppliers and whether departures from these policies may allow for some decrease in prices (at least temporarily). For regions more heavily dependent on the import of construction materials but who are actively working to mandate an increase in local content requirements (with a relatively limited supplier pool), this is potentially going to increase pricing further due to lack of competition - ultimately it will be a policy decision between development of local skills against cost.

CONCLUSION

The current inflationary and supply chain cost pressure is affecting infrastructure projects globally and we are seeing similar issues across projects in Australia, the UK, Europe, the Middle East or the US. In terms of approach, to the extent there is appetite at the procuring authority level to provide protection the trend is towards limited protection in respect of an identified set of commodities with volume risk remaining with the contractor. This kind of protection is primarily manifesting itself in those projects currently in procurement with relatively little appetite to re open executed contracts. There are exceptions to this, however, the Inflation Co operation Framework in Ireland being an example.

Over the coming months we expect to see this issue develop further as more projects close that will have had to agree a position on cost escalation. This will help identify if a consistent 'market' approach is developing and if certain indices come to the fore, either in a particular jurisdiction or globally.



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5. <https://www.constructionleadershipcouncil.co.uk/wp-content/uploads/2022/05/CLC-Press-Release-25-May-CLCacts-to-ease-impact-of-construction-inflation.pdf>

6. <https://www.acq.osd.mil/dpap/policy/policyvault/USA000999-22-DPC.pdf>

Infrastructure kickstart?

Naomi Horton writes...

At the time of writing the world is grappling with the knock-on effects of the COVID-19 pandemic, with some countries still experiencing intermittent lockdowns, as most others have re-opened their societies and rebooted their economies. Yet, just as we have escaped one global catastrophe we have been thrust into another with the Ukraine war and the resulting energy and cost of living crises, inflation and the rebalancing of the global geopolitical status quo. Having emerged into the post-pandemic "new normal", the question on everyone's lips is what the "new normal" will look like. Truisms abound and I have made a mental note to do my best not to use the word "unprecedented" in this short article.

So what does this mean for infrastructure, one of the key backbones of the world economy? If COVID-19 and energy impacts are coupled with the pressing demands of sustainability and decarbonisation, and the increasing gap between the pace of change in infrastructure and technology, this forced opportunity to "stop and think" must surely be grasped with both hands. Can the current crises act as a catalyst for a more holistic approach to developing resilient and sustainable infrastructure that is designed for the needs of the next rather than the last century?

Here are a few thoughts on what the infrastructure sector might take from our current situation.

- The continuing requirement for massive global infrastructure investment for the next 15-20 years (\$3.7 trillion a year until at least 2035, as estimated by McKinsey, has not disappeared overnight. If anything, COVID-19 has exposed chronic underinvestment in social infrastructure in many countries.
- As lockdown requirements have lifted, governments must kick-start economies, turning to the tried and tested Keynesian approach of economic infrastructure investment as that stimulus. Early indications are that the UK Government is no exception, with a clear desire for infrastructure projects to continue unabated, witness issuing the Notice to Proceed for the multi billion pound HS2 project at the height of UK lockdown. This of course leads to the question as to who will pay – will previous prudent fiscal rules be torn up or is this the time to focus on leveraging more of the "tidal wave" of private money into new infrastructure?
- Projects must continue safely on the ground. Site managers need to find ways of working so as to manage and mitigate the continued challenges of the virus and comply with local COVID-19 regulations, where they still apply. Employers must provide the confidence of a safe work place for employees, to ensure their health and safety in the first instance, and reduce risks of poor attendance, employee claims and union action.
- The pandemic has highlighted the vulnerability of supply chains. Addressing this is likely to require both the continuation of public support measures and a more flexible and resilient approach from the private sector. Critical supply chains must be secured, with contingency plans put in place. Alternative construction sequencing may help to mitigate both supply chain issues and virus related health and safety factors, and the latest technological developments may assist.
- The pandemic has accelerated the move to remote working and virtual communication. This not only needs to be factored into thinking on future transport and other related infrastructure needs, but also emphasises the exponential reliance on data transmission and storage. Demand for increased capacity and resilience in this area is a one way bet.
- We now have an opportunity to accelerate the use of technology in infrastructure. This has lagged behind in recent years. The use of AI, advanced data analytics, 3D printing, new materials and maximising the planning and operation of infrastructure through initiatives such as digital twins can be used to manage health and safety risks, enhance resilience of project implementation as well as delivering more flexible and resilient infrastructure solutions.
- The environmental pressures to increase the proportion of sustainable power generation is not diminished by COVID-19; decarbonisation targets continue. If anything, the pressure may be increased as global populations see for themselves the environmental benefits of lower emissions during lockdowns. However, decarbonisation comes at a cost. The burning question is whether the economic adverse winds of COVID-19 will blow developing market appetite for decarbonisation off course or can industry offer governments increasingly efficient and sustainable solutions that can help close the funding gap.

Our infrastructure will need to adapt to a world that is unlikely to be quite the same as the one we have previously known, and appears increasingly likely to be a "living with COVID-19" rather than a "post COVID-19" world for some time. However, we have adapted before, and will no doubt do so again. Let us all hope that the current crises can help kickstart both the public and private sector's approach to infrastructure to focus on designing and delivering more joined up, adaptable and resilient infrastructure solutions as the "new normal".



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