Year in review

Legal developments in the global construction and infrastructure sector

2019

EXPLORE

INTRO

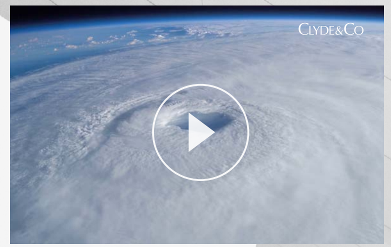
We are pleased to present our Year in Review for 2019, a collection of market and legal updates, which sets out developments in the construction and infrastructure sector globally over the past 12 months, as well as insights into what you need to be aware of in 2020.

The past year has seen significant geopolitical, environmental and legislative change, which has had, and will have, wide-ranging impacts on the construction and infrastructure sectors globally:

- In the past year we have witnessed a definitive step change in momentum on climate action. A growing number of countries, cities and companies are declaring ever more ambitious net zero emissions targets. In order to achieve these targets, and remain resilient to the physical risks associated with climate change, we expect to see significant investment into upgrading existing infrastructure as well as constructing new infrastructure.
- The Belt and Road Initiative continues apace with investment into infrastructure across Asia, Africa and the Middle East. We have seen cancelled projects come back on line during 2019 and, following the second Belt and Road Forum, which saw USD 64 billion worth of deals signed, we expect this to continue to build momentum.
- The UK is set to Brexit at the end of this month, the lead up to which caused extensive market uncertainty throughout 2019. Whilst we may now be certain that Brexit will take place, uncertainty surrounding what this will actually look like is set to continue throughout 2020. Following the December general election, the government has committed to investing up to an extra GBP 100 billion in infrastructure, which will dramatically improve market conditions if realised.

These are a selection of the macro themes impacting the industry throughout 2019 and into 2020. On the following pages we provide a jurisdiction specific analysis looking at the key developments in your region.

If you have any questions or would like further information on any of the topics raised, please don't hesitate to contact one of our global team via **our website** or at **infrastructure@clydeco.com**.



Climate change and the construction industry

Belt and Road Initiative

REGIONS

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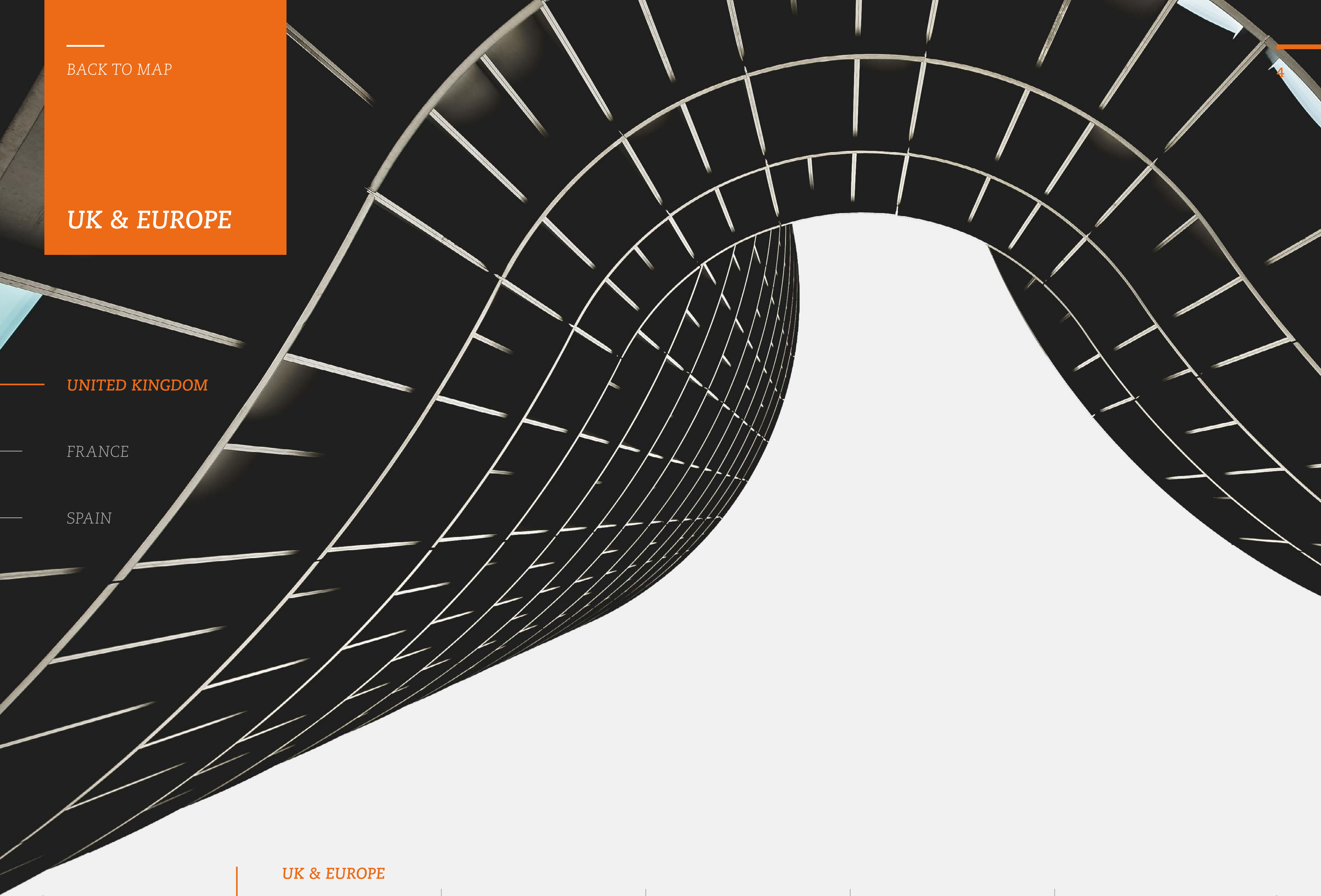

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Cancellation of projects – what does it mean and how to protect your business

2019 saw the launch of a review of HS2, putting the threatened cancellation of one of the UK's largest infrastructure projects onto front pages everywhere. At a time of political and economic uncertainty, employers and contractors start to think about how best to protect their businesses if a construction project goes off the rails. Cancelling or terminating a project is always a last choice and businesses should do what they can to avoid it – but if it has to be done, it is crucial to do it properly.

The common law provides two main methods of termination: repudiation or frustration.

Repudiation applies where a party commits a breach that goes to the heart of the contract – for example, the contractor abandons the site without cause; or the employer fails to give access to the site. If the non-defaulting party 'accepts' the repudiation, then the contract comes to an end. The big risk here is that, if a party tries to terminate when there has not been a repudiatory breach, that party will itself have repudiated the contract. That is not a good position to be in, as it entitles the innocent party to compensation putting it in the same position as if the contract had been properly performed – potentially a significant sum.

Common law also allows contracts to be terminated by frustration in circumstances where further performance is impossible, illegal or radically different from what the parties contemplated.

This is a very high bar. For example, whatever you think about Brexit, Brexit is not a 'frustrating' event in contractual terms!

Alongside the common law rights, most construction contracts contain express clauses allowing termination in certain circumstances, either for breach of contract (e.g. failure to proceed regularly and diligently with the works; failure to make payments) or for convenience (because a party no longer wishes to proceed, perhaps because the project cannot secure funding).

Where the breach can be remedied – for example, defective works – the contract will often allow a period of time to rectify the breach before the right to terminate arises. A party should carefully ensure that termination rights have in fact arisen before seeking to exercise them – otherwise that party may itself be in breach.

The contract will generally provide that the contractor is entitled to some compensation when the works are terminated for convenience or for employer default e.g. payment for work done to date, costs reasonably incurred in expectation of completing the works, costs of demobilisation and removal of equipment, or profits that would otherwise have been made. When terminated for contractor default, the contract will often provide for the employer to be compensated for its additional costs to complete the works, assuming that the employer elects to do so.

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In the run-up to possible cancellation, the parties should be alert to dispute avoidance strategies and take practical steps such as:

- Continue to comply with contractual obligations – if a contractor faced with possible cancellation stops work, this may itself be a repudiatory breach;
- Make sure that you continue to give proper notifications under the contract, for example of variations;
- Take particular care in relation to the storage and management of documents – which may in due course become evidence (this is especially the case with contracts that require active project management, such as the NEC suite);
- Pay close attention to what you say in project correspondence, and use the protection of 'legal privilege' if you can; and
- If you are going to terminate, make sure that you follow the contractual procedures to the letter.

After cancellation, numerous practical steps will be needed, including for example: assignment/novation of sub-contracts; handover of manuals and documentation about the status of the works; managing issues as to title to materials, plant and equipment; dealing with site security and so on.

There may well be arguments between the parties about the validity of the termination, and about liability for and amount of any compensation. You can put yourself in the strongest possible position by carefully planning and implementing a strong dispute management strategy.

Suddenly, it's all about procurement

How public infrastructure contracts are awarded, and how public money can be channelled to the private sector, have become hot topics over the last 12 months.

The new Conservative government has promised to switch the spending taps back on to deliver more investment in public infrastructure. All of these contracts need to be procured. Equally, businesses in trouble across the UK have increasingly been turning to the government for financial support. The EU state aid regime is often seen as the barrier to such state intervention.

From being important (but, perhaps, niche) areas of legal practice, politicians are focussing on reform to public procurement rules as being one of the key advantages of Brexit.

"Buying British" has become a buzzword, but not one which is consistent with EU single market membership. What are the facts behind the fiction?

Firstly, the public procurement and state aid regimes do have their origins in European Union law. The EU's single market aims to harmonise the approach to public procurement and state aid regulation to ensure that there is no national preference when awarding high value contracts or investing large sums of public funding into industry.

Procurement law, in particular, has been heavily influenced by the UK when the most recent directives were agreed. It is not clear, of course, what changes the new government could look to make to the procurement regime in the UK (and even less, what the EU will agree to in any free trade agreement), but our suggestions for areas to consider are:

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- Potential for alternative dispute resolution in procurement? 2019 has seen a continuing increase in the number of public procurement disputes across all sectors, including health, waste and energy. The high value of such claims and the need for High Court litigation with very short limitation periods make this an expensive route of last resort. There is scope – regardless of Brexit – for the UK to introduce a lower level forum (akin to an employment tribunal) to deal with procurement claims. This is the case in many other EU countries
- One set of rules for all types of procurement? There are currently 5 sets of procurement rules in the UK covering public sector, utilities, concession contracts, defence procurement and the remedies regime. Any change could see consolidation into one set of rules with optional provisions depending on the subject matter of the contract
- Maintain consistency with World Trade Organisation (**WTO**) Government Procurement Agreement (**GPA**). The UK has applied to the WTO to become a signatory of the GPA in its own right because, after Brexit, the EU's place on the GPA ceases to apply to the UK. The GPA sets out less detailed provisions than the EU regime, but many of the principles are the same – particularly, in relation to equal treatment obligations. Any replacement procurement regime in the UK would need to at least comply with the GPA principles. In practice, however, it seems likely that the EU would require continued compliance with the EU-wide procurement regime, depending on how close a relationship the UK wishes to have with the EU in the future

Whatever happens in the Brexit process, the current public procurement regime will be maintained in the short term. With the current Withdrawal Agreement, the Public Contracts Regulations 2015 will continue to apply until at least the end of the transition period (December 2020). In a subsequent "no deal" context – a hard withdrawal from all of the institutions of the EU – the European Union (Withdrawal) Act 2018 will ensure that the legislation continues until such time as it is amended. The main practical change would be that UK tenders would be submitted to the new "Find a Tender" portal, rather than the Official Journal of the European Union.

As with much around Brexit, it is too early to be sure of what the changes could be, and when they could arise. But for many infrastructure projects planned by any new UK Government, the current rules will apply.

How the construction industry is reacting to climate change

The world's climate is changing rapidly. Leading scientists, most nation states, their politicians and many corporations agree that climate change is the biggest threat to humanity. Global infrastructure resilience, economic development, food security, trade flows, and human health all stand to deteriorate under current projects and this will have a profound impact on businesses. The UK government has committed to reduce greenhouse gas emissions to zero by 2050. EU and UK regulators have emphasised that the physical transition and liability risks from climate change and their associated impacts are becoming an increasing area of focus.

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The construction industry is responding to climate change in various ways, including sustainable building design and operation and green construction practices on site. Modern methods of construction, such as off-site manufacturing (**OSM**), have a key role to play in this. OSM has the potential to:

- Reduce waste materials, over-ordering and contingent ordering thereby reducing CO^2 emissions from the manufacture of such materials;
- Reduce on-site labour and materials and associated CO^2 emissions from the transportation of personnel and materials to site;
- Lead to more energy efficient buildings through precision manufacturing and reduced defects in construction; and
- Reduce emissions from cement through the use of precast concrete and alternative materials.

It is clear that modern methods of construction and OSM have the potential to help the industry tackle its impact on the climate. It is imperative for construction businesses to adapt their business models to manage their exposure to the risks that climate change legislation may cause.

To read more please click **here**.

Ban on Combustible Cladding

2019 was the year the Government tried to catch up with the views of both the public and the industry that combustible cladding elements were likely to have been a major contributory factor in the Grenfell tragedy. The Building Regulations were added to at the end of 2018 to ban any combustible materials from forming any part of the external wall of a building over 18m (i.e. five storeys) in height. The Building Regulations are designed to slow fire down so that people can escape in time should the worst happen. Five storeys is the maximum that a fire engine's ladder can reach, and so the Building Regulations are more stringent over that height.

After a transition period ending on 21 February 2019 (during which Building Control approval could be obtained and a meaningful start made on work relying on the old Building Regulations), the ban came into force in full. While the ban has been welcomed by many it has turned out that the ban itself has presented some difficulties. Firstly, many materials used at height, although not hazardous in a fire per se, are now banned from being used on a building over 18m in height. The most-mentioned example of this is the laminate used on glass for balconies. As that lamination material includes a very small percentage of organic material, it is not "non-combustible" and is therefore banned. However, that same laminate has been required to stop glass panes in balconies falling to the ground should they shatter or break. This has not yet been resolved.

Similarly, the new regulations leave a grey area where, for example, a building needs to be re-clad, or have its insulation replaced, where an element of the cladding system does not comply with the previous Building Regulations. It is unclear whether any remedial work carried out would constitute "building work" for the purposes

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of Regulation 3 of the Building Regulations. If remedial work is "building work" then the revised Building Regulations apply and the building, although it would have complied with the standards which applied at the time, may need to be entirely re-clad.

Other problematic results can occur - for example, where cladding panels comply with the Building Regulations but insulation does not, if the insulation is replaced but in the process of doing so the cladding panels are removed, it may not be possible to reattach them if they are not completely non-combustible (as the revised Building Regulations and the ban on combustible materials might apply).

The Government has indicated that it is aware that its blanket ban has had unforeseen consequences and is considering whether a more nuanced approach might be useful. A revised set of Building Regulations may be made available in 2020, so watch this space.

Feeling excluded from the action …?

During the drafting of the Housing Grants, Construction and Regeneration Act 1996 (as amended) (the **Act**), various parties lobbied Parliament to ensure that their parts of the industry were not impacted by the provisions of the Act and accordingly certain exclusions were included within the Act at Section 105(2).

Since its enactment, the Courts have been struggling to interpret these exclusions in a practical and even manner. Clyde & Co has been involved in two cases recently, which highlight that these difficulties still continue some 20 years after the commencement date of the Act.

Of particular importance is Section 105(2)(c), which provides:

> "The following operations are not construction operations within the meaning of this Part –
>
> (c) Assembly, installation or demolition of plant, or erection or demolition of steelwork for the purposes of supporting or providing access to plant or machinery, on a site where the primary activity is –
>
> i. *Nuclear processing, power generation, or water or effluent treatment, or*
>
> ii. *The production, transmission, processing or bulk storage (other than warehousing) of chemicals, pharmaceuticals, oil, gas, steel or food and drinks;*

C Spencer Limited v MW High Tech Projects UK Limited [2019] EWHC 2547 (TCC)

This case centred on the obligation of a paying party to identify within a payment notice the split between included and excluded operations in a hybrid contract.

In this case, it was common ground between the parties that the site was one where the primary activity was power generation.

MW High Tech Projects UK Limited (**M+W**) was engaged as the main contractor by Energy Works (Hull) Ltd, to design and construct a waste to energy power plant in Kingston-upon-Hull. C Spencer Limited (**CSL**) was sub-contracted to design and build the civil, structural and architectural works. CSL's works included a mix of construction operations under the Act and non-construction operations.

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A dispute arose when CSL issued a payment application which separated the amounts due in respect of the construction operations and the non-construction operations. This was in contrast to how it had produced the previous 31 payment applications, where there was no separation of the amounts due in respect of the construction operations and the non-construction operations. M+W's payment notice did not distinguish between the operations and instead provided an overall figure for all works undertaken by CSL.

The validity of the payment notice was challenged, and CSL issued a Part 8 Claim in excess of GBP 2 million on the ground that M+W did not clearly identify the different sums due for construction and non-construction operations. Therefore, CSL could not identify how M+W had calculated the sum stated as due.

The Court confirmed that the Act applied only to the construction operations under the sub-contract. However as the parties had agreed that the payment terms (which were Act compliant) would apply equally to all works under the sub-contract, including non-construction operations, the payment mechanism would be valid.

The wording of the Act does not specially require the amounts due for construction operations and non-construction operations to be distinguished, in order for a payment notice to be valid. The Court, therefore, agreed with M+W, but provided CSL with permission to appeal.

The decision of the appeal is of vital importance to those in the nuclear, power generation and other sectors covered by the exclusion, in terms of how already complicated payment mechanisms are to be administered.

If the appeal is successful, then it seems likely that standard form contracts for process plants may need to be amended to accommodate two separate payment regimes.

The appeal is due to be heard this month, so watch this space ...

Engie Fabricom UK Limited v MW High Tech Projects UK Limited [2019] EWHC 1876 (TCC)

This is another case focusing on Section 105(2)(c). Whilst set on the same project as the CSL case, this dispute focused on the issue of whether the primary purpose of the site was power generation.

M+W appointed Engie Fabricom UK Limited (**Fabricom**) under a sub-contract for the gasifier installation works on the same project in Kingston-upon-Hull.

A dispute arose between the parties in relation to payment for variations under the sub-contract, which was referred to adjudication by Fabricom. M+W submitted a jurisdiction challenge to the effect that the adjudicator had no jurisdiction, as the primary activity was power generation, which was excluded under the Act. This was critical, as the sub-contract contained an amendment, which provided that the right to adjudicate was conditional:

> “
> This Clause 47 (The Right to Adjudicate) applies only to the extent (if any) required by the Construction Act 1996, as amended

The parties only had a right to adjudicate a dispute, to the extent permitted by, and consistent with, the provisions of the Act.

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The adjudicator determined that the primary activity was thermal treatment of waste rather than power generation, and so the exclusion in Section 105(2)(c) did not apply. The sub-contract therefore allowed for adjudication, and the adjudicator had jurisdiction to determine the dispute. The adjudicator ordered M+W to pay Fabricom the sum of GBP 27,062.25 plus interest and VAT, and Fabricom sought to enforce the adjudication by summary judgment.

The Court dismissed the application, with the judge finding that the answer was unclear and that he did not have all the evidence (factual and expert) necessary to make a proper determination of the issue, and that, therefore, he could not grant summary judgment. Full trial took place in December last year – we are awaiting the Court's handing down of the judgement and we will keep you posted on the outcome.

Due to the uncertainty of applying the exclusion in Section 105(2)(c) of the Act, the Courts have long been advocating that Parliament act to have the exclusions removed. Parliament hasn't done so but a further Court of Appeal judgment criticising the exclusion may precipitate action by the new government.

Commercial sense prevails once again in the Court of Appeal

*Bennett (Construction) Ltd v CIMC MBS Ltd (formerly Verbus Systems Ltd) [2019] (**Bennett**)*

It's always good to see the courts taking a common and commercial sense approach and seeking, as far as possible, to honour the bargain made by the parties. It's particularly encouraging in the construction industry to see this when it comes to the much disputed and discussed payment sections of the Housing Grants, Construction and Regeneration Act 1996 (the **"Act"**) and the Scheme for Construction Contracts 1998 (the "**Scheme**").

That is exactly what happened recently in the Bennett case in the Court of Appeal. Milestone payments were found to be compliant with the Act and the implied payment terms in the Scheme were found to be capable of co-existing with the payment provisions of the contract (and not requiring wholesale replacement) - the two central issues to the case - thereby doing the least violence to the agreement between the parties.

To read more please click **here**.

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Do liquidated damages clauses survive contractual termination?

Triple Point Technology v PTT [2019] (***Triple Point***)

Following what has been a series of conflicting judgments, the case of Triple Point in the Court of Appeal has begun to shed some much needed light on the application of liquidated damages clauses in circumstances where the contract is terminated or abandoned.

In short, the answer is that it depends on the wording of each individual contract. Whilst this may not seem particularly satisfactory or ground breaking, and will hopefully be built upon in future case law, the judgment does provide some parameters and revive an important authority, which had somehow become sidelined. The literal effect of the wording here meant liquidated damages did not survive termination.

To read more please click **here**.

Payment for Construction Works – Do "true value arguments" trump the duty to pay the sum due?

Grove Developments Limited v S&T (UK) Limited [2018] (***Grove***)*; M Davenport Builders Ltd v Greer and another [2019]* (***Davenport***)

In Grove, the court found that an employer who has failed to serve its own payment notice or pay less notice must pay the amount claimed by the contractor, because that is "the sum stated as due", but the employer is then free to commence its own adjudication proceedings, in which the "true value of the application can be determined".

However, Coulson J stressed that the entitlement to bring 'true value' adjudication proceedings could only be exercised by the employer, once it had paid the sum due in the interim payment application.

So, to answer the question: "true value" arguments do not trump the duty to pay sums due (and it is in fact the other way round).

But does this mean that the right to refer a dispute to adjudication, in this case a "true value" adjudication, "at any time" has been fettered? In Davenport, the approach was relaxed slightly and a "true value" adjudication decision had been commenced and concluded but could not be enforced until the payment, which had become due, had been made.

To read more please click **here**.

A look back on last year's review …

The end of PFI: One year on and no clear answers

It has been over a year since former Chancellor Philip Hammond, somewhat surprisingly, announced the end of PFI and PF2 during his budget speech on 29 October 2018, although public private partnerships, more generally, were allowed to continue. Unfortunately, due largely to the continuing Brexit debate throughout 2019, the question of what will replace PFI and PF2, to finance much needed public infrastructure, has not yet been answered.

The National Infrastructure Commission's National Infrastructure Assessment (**NIA**) report has been published, and significant amounts of the finance and funding required for the UK's estimated GBP 600 billion infrastructure pipeline will need to be provided by the private sector. We continue to await the Government's National Infrastructure strategy in response

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to the NIA but, in the meantime, it is unclear how any future projects involving public private partnerships will be financed.

The Infrastructure Finance Review consultation was conducted by HM Treasury and the Infrastructure and Projects Authority from 13 March 2019 to 5 June 2019, during which time interested parties were invited to submit proposals for replacements to PFI/PF2. It was made clear in the consultation paper that the government would no longer consider off-balance sheet models similar to PFI/PF2.

Instead, the government welcomed models that would provide greater transparency and could demonstrate that the benefits brought by using private capital would outweigh the additional cost to the taxpayer. The successful on-balance sheet proposal would be based on and judged by the value for money guidance, would avoiding crowding out private investment and would demonstrate consistency with wider government initiatives. The results of the consultation have not yet been released.

Post-Brexit, considerable challenges will remain in deciding the future of any PFI replacement. The European Investment Bank (**EIB**), which has lent EUR 118 billion to the UK since 1973, will be difficult to replace. While criticised for crowding out investment in infrastructure from commercial banks, the EIB has given investors the confidence to invest in higher-risk new-build projects and has provided market capacity on larger projects. The UK currently lacks any institution that can provide similar vision and strategy. Without access to the EIB, the government will need to attract non-traditional investors to fill the gap. New and existing loan and guarantee schemes will need to be developed and broadened, so as to be made more attractive.

Until the government's consultation results are published, it is unclear what model any future public private partnerships will take. What is clear, however, is that the government will need to find a replacement for PFI/PF2 sooner rather than later.

Disclosure Pilot Scheme in the TCC

2019 was the year the Business and Property Courts in the UK brought in and trialled a new approach to disclosure, known as the Disclosure Pilot Scheme or Part 51U of the Civil Procedure Rules. Essentially the aim was to make parties to litigation focus on the documents sooner and to mimic, to a certain extent, the approach used in international arbitration, where some documents are provided with statements of case. The Courts then have a menu of options to order the parties to give different forms of disclosure depending on the issues at hand.

Although the idea of seeking to focus the parties on disclosure sooner is a good one, the downside for parties to litigation is that costs are more front-loaded with more work having to happen sooner in the process than used to be the case.

Although that is a good driver for parties to settle their cases, this will only benefit parties whose cases do in fact reach an amicable settlement.

Our experience so far of the Pilot Scheme is that the Court is somewhat wary and is tending to order an approach to disclosure which is most akin to the previous regime. While this makes the parties (and their lawyers) more comfortable, it is a missed opportunity, if the more directed disclosure request approach, so often used in arbitration, doesn't get greater uptake, in order to keep costs down and target the parties' efforts on the documents which really matter. Construction disputes are particularly document heavy and it is a common tactic to dump irrelevant documents on the other side, but in the long term this does not really benefit anybody involved. 2020 will show whether, now that most cases experiencing the new regime were started after it began, the Courts can use their new powers to improve parties' litigation experiences.

Unfair payment and retention practices

Last year, we reported on the "hot topic" that was unfair retention and payment practices in 2018 and in particular, the Construction (Retention Deposit Scheme) Bill, published on 23 April 2018. The Bill sought to protect retention deposits under construction contracts by requiring retentions to be placed in a government approved retention deposit scheme, and a failure to do so would render invalid the retention provisions in the contract.

Well, the Bill has fallen at the second hurdle and will not become law. Its second reading in Parliament was delayed on several occasions and has not been carried over into the new session. The end of this Parliamentary session spells the end of this particular attempt at legislating to limit the use of retention, but that is presumably not the last we will hear on the matter because the bill did appear to have significant support.

Build UK seems to have taken up the mantle of ridding the industry of cash retention and has produced two related documents: Minimum Standards on Retention (the **Standards**) and a Roadmap to Zero Retentions (the **Roadmap**). Build UK describes itself as the leading representative organisation for the UK construction industry, representing over 40% of UK construction.

The Standards include principles setting boundaries on the use of retention – for example, sub-contract provisions must be no more onerous than those in the head contract and the contract value must be at least GBP 50,000 (increasing to GBP 100,000 in 2021) to incorporate retention provisions. It also envisages lower percentages than those currently seen in the market – 1.5% (reducing further to 1% in 2021) - whether before or after practical completion, instead of 3% (or even 5%), with the retention amount only being deducted from final and not interim payments. The Standards go so far as to include proposed amendments to certain JCT and NEC4 contracts.

The Roadmap sets out a time line to move to what it sees as the "industry ambition" of zero retentions by no later than 2025, albeit the key milestones for implementation in the Roadmap envisage this happening by 2023.

Parties are not bound to abide by Build UK's principles and goals, and it will be interesting to see what level of uptake, if any, they get in the market. We suspect we won't see the end of retention by 2023 (or even 2025) but stranger things have happened and with cash flow being such a significant feature of the construction industry, the wind of change may be starting to blow. Retention held in the construction industry in England alone is estimated to be in the region of GBP 3-6 billion!

Reducing the value of, or doing away with, cash retentions would most likely see an increase in reliance on other forms of security, such as bonds, and for this to be a realistic substitute, we think there would need to be a shift in the bond market, such that retention bonds are affordably priced, so that they become routine components to a contract rather than something exceptional. Without some form of security, employers may be more likely to withhold payment, which in turn would lead to an increase in disputes, and there would be little incentive for contractors to complete snagging lists. Other Standards relating to sub-contracts and minimum contract value seem on the face of it to be more achievable.

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Fighting corruption in the infrastructure sector: *Société Alstom Transport SA et al. v. Société Alexander Brothers Ltd*, C.A. Paris, 10 April 2018 and 28 May 2019 (Alstom)

In a recent decision, rendered on 28 May 2019, the Paris Court of Appeal adopted a strong stance when it comes to fighting corruption, showing once again that France is a jurisdiction that doesn't take allegations of corruption lightly and will carry out an in-depth review of awards that are tainted by allegations of corruption. The decision arose in the context of a dispute in the infrastructure sector.

In the Alstom case, subsidiaries of Alstom concluded three consultancy contracts with Alexander Brothers, a Chinese company. The latter was supposed to assist Alstom in submitting bids for the supply of railway equipment in China. Alstom made successful bids but only partially paid commission to Alexander Brothers for two of the contracts and refused to pay under the third one, alleging that the consultancy company had failed to provide sufficient detail of the services rendered. Alstom claimed that making any further payments would constitute a breach of its compliance obligations and that the national authorities may interpret any such payment as remuneration for corrupt practices.

Alexander Brothers subsequently commenced arbitration proceedings in Switzerland. In 2016, the arbitral tribunal rendered an award concluding that Alstom had failed to prove its allegations of corruption and ordered Alstom to pay the outstanding commissions. Alexander Brothers obtained the *exequatur* of the award in France, which was subsequently appealed by Alstom before the Paris Court of Appeal.

By way of background, Article 1520 of the French Code of Civil Procedure provides that an award found to be contrary to international public order cannot be recognised or enforced in France. It is established case law in France that corruption and money laundering are contrary to international public order.

In a first decision, dated 10 April 2018, the Court of Appeal listed a number of red flags that could characterise a contract as corrupt and took the unusual step of reopening proceedings to allow the parties to comment on these elements, ordering Alstom to produce relevant documents.

A year later, in a second decision, rendered on 28 May 2019, the Court of Appeal highlighted that, by their very nature, acts of corruption are difficult to identify and that the only way to establish whether an award endorses corruption is by using the red flags technique. The Court carried out an in-depth review of the award and conducted a thorough analysis of each of the three consultancy contracts.

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The court noted that Alexander Brothers had failed to provide sufficient evidence to justify payments due under the consultancy contracts.

The Court considered that the only service that could have justified commission was the transmission of confidential documents to Alstom, but that Alexander Brothers had failed to show that such documents had been obtained from the Chinese Government, through a "transparent and legitimate process". Accordingly, the fact that Alexander Brothers had obtained the documents was a red flag for corrupt activity.

The Paris Court of Appeal also raised other red flags, such as the fact that Alexander Brothers was not active before the conclusion of the three consultancy contracts and that it had purchased works of art and expensive furniture, which were not recorded in its balance sheet. And last but by no means least, the Court considered Alstom's argument that it had regularly resorted to the bribing of foreign corrupt officials, showing that the purpose of consultancy contracts is the corruption of Chinese officials. The Court took this argument into account, irrespective of the fact that Alstom would benefit from its own turpitude. Indeed, the Court held that the goal of preventing a contract for corruption from being enforced is in the public interest and therefore prevails over the principle of *nemo auditor* (no one can be heard who invokes his own turpitude).

France's new climate law

France's new climate law – the Energy-Climate Law – sets out an extensive energy and climate policy for the next 30 years, in line with the 2015 Paris Climate Agreement. The new law was adopted by Parliament on 26 September 2019 but has not been promulgated yet as the *Conseil Constitutionel* is currently reviewing it.

One of the most ambitious goals of the Energy-Climate Law, which sees the introduction into the French Energy Code of the concept of "ecological and climate emergency", is to achieve carbon neutrality by 2050 and reduce fossil fuel consumption by 40% by 2030. However, the objective to reduce nuclear energy by 50% has been postponed until 2035 (instead of 2025).

The new bill envisages that the last four remaining coal-fired power plants will be closed down by 2022, and introduces various measures to support the development of renewable energies, such as hydrogen, and the removal of obstacles to the installation of photovoltaic panels on roofs, as well as measures to reduce energy consumption.

Another innovation of this bill is the establishment of the High Council on Climate *(Haut Conseil pour le Climat)* whose role is to evaluate climate action taken by the government and local authorities. The High Council on Climate will be required to analyse, on an annual basis, the implementation and effectiveness of measures taken to reduce greenhouse gas emissions, develop carbon sinks and reduce the carbon footprint, including climate related budgetary and tax measures.

By way of example, the bill also envisages combatting energy inefficient housing, with a view to eradicating this problem by 2028. It looks to do so by imposing certain measures, such as the prohibition of rent revision unless a certain level of energy performance is met, and an obligation to attach an energy audit to the energy performance evaluation of energy inefficient housing. To strengthen the fight against fraud involving energy saving certificates, the law speeds up control procedures and facilitates the exchange of information between government departments, in particular with the National Centre for Energy Saving Certificates.

Recognising the ambitious goals set out in the Energy-Climate Law, and emphasising the importance of their implementation, the Law provides incentives for the development of renewable energies on the one hand and energy efficient solutions on the other.

Mini-grid projects in the Democratic Republic of Congo (**DRC**) – a national infrastructure in the making?*

The energy sector in the DRC is currently undergoing a revolution caused by: (i) strong innovations in the field of production, storage and distribution technologies; (ii) a fall in manufacturing costs for solar PV production and batteries; and (iii) mobile banking and prepayment applications.

The effects of this revolution are magnified in populated regions where energy infrastructures are either non-existent or obsolete, due to weakened and failing national utilities. Considering those key drivers, there is a huge opportunity today to give millions of people, currently without electricity, future access to clean and affordable energy, and to build a domestic energy market in response to real economic demand.

By way of example, on 28 September 2018, the Ministry for energy in the DRC published an expression of interest for the selection of an international operator for the financing, construction and operation of three mini-grid projects (as part of the “Essor” Project for enhancing the business and investment environment in the DRC). These projects are to be based on hybrid solar PV technology, with optional storage, scaled up to municipal level, and for a duration of at least 15 years. The three cities are Isiro, Bumba and Genema in the DRC. Earlier this year, the African Development Bank has approved a USD 20 million facility to DRC to support this project.

Mini-grid projects can generally be described as small-scale electricity generation (10kW to 10MW) serving a limited number of consumers via a distribution grid that operates in isolation from national electricity transmission networks and whose costs are generally repaid by way of functioning net metering, prepayment and mobile banking.

This approach taken by the DRC mirrors that seen over the history of electrification in mature economies, which started 150 years ago: with a handful of industrialists or individuals in neighbourhoods wishing to benefit from safer technologies than gas technology. Operating in a very limited production area, they connected and sold their surplus to others such as restaurants, coffee places and workshops in their neighbourhood. And so it begins, neighbourhood by neighbourhood, city by city, expanding to a national infrastructure.

*For those wondering why an article on the DRC appears in the section on France, our Paris office also serves as a platform for our international activities in French-speaking Africa, Maghreb and the Middle East. Much of the Paris office’s renewable energy practice is carried out in Francophone Africa, where we have experience in all the established markets such as Algeria, Nigeria, Angola, DRC, Equatorial Guinea, Gabon, Chad and Libya as well as in emerging markets.

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The FIDIC contracts and French Law – a new analysis

David Brown and Michael Conrad from our Paris office have contributed a chapter to a recent publication entitled ‘The International Application of FIDIC Contracts: A Practical Guide’, instigated and edited by Donald Charrett.

Their focus is construction and dispute resolution in France, and the areas of the FIDIC general conditions that need to be reconsidered in order that FIDIC-based contracts are consistent with French law.

Given the largely common law style and content of the FIDIC forms, it is perhaps inevitable that there will be inconsistencies with French law. Particular attention must be drawn to the numerous issues involving obligatory provisions of French law.

For example:

– Payment of sub-contractors: careful consideration needs to be given to the FIDIC provisions in light of mandatory provisions under a French law of 1975 that regulates, inter alia, direct payment of a sub-contractor by the employer and the setting up by the contractor of guarantees for the benefit of sub-contractors

– Termination by the Employer: French law contains a number of mandatory requirements that provide a contractor with greater protection than foreseen under the FIDIC general conditions

– Delay damages: The FIDIC provisions remain quite close to the English law concept of liquidated damages. The corresponding mandatory French law concept of delay penalties may operate in a manner not foreseen by the FIDIC wording

– Taking over and defect liability: French law foresees a substantially different regime, including in particular a range of mandatory liability provisions, of which the best known is perhaps decennial liability with respect to structural parts of the works

Other mandatory requirements cover construction insurance, environmental liability and health and safety. All in all, therefore, the use of a FIDIC form for construction works located in France and/or subject to French law is far from straightforward and requires specialist input.

The chapter also discusses the fundamentally different approach of the FIDIC forms for major construction works when compared to French standard forms (such as CCAG, or NF P03-001 / NF P 03-002), highlighting the project management focus in the FIDIC forms underlined even further by the most recent editions of 2017.

Domestic French construction professionals will also be surprised by the content and extent of the claim and dispute resolution provisions that are now standard in the principal FIDIC forms. French court procedure has no special regime adapted to construction disputes, nor is there mandatory adjudication as in certain common law jurisdictions. In particular, the FIDIC Dispute Avoidance/Adjudication Board is unknown in standard French contracting, although disputes boards have been used recently on a number of major construction projects in France.

The book is published by Routledge – see **here** for more information.

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Regulatory developments in public procurement

The revamping of public procurement law announced in July 2015 was completed on 5 December 2018 with the publication in the Official Journal of the legislative and regulatory parts of the Public Procurement Code, which then came into force on 1 April 2019.

These parts are intended to simplify and streamline French public procurement law by rethinking its structure and rationalising the classification of public procurement contracts.

However, its continuous updating has not achieved the promised simplification of public procurement law. On the contrary, the various adaptions since it came into effect continue to create legal uncertainty for public purchasers who find themselves lost in the face of this regulatory instability.

This is reflected in the publication of some twenty decrees on 31 March in order to correct this code. Thus, this young code continues to evolve as new legislation is adopted.

Outlook for Chinese investment in Spain

In 2018, Chinese investment in Spain was more than double that of the previous year, growing by 162%, reaching EUR 1,020 million, compared to EUR 392 million in 2017. Spain has been the sixth favourite European destination for Chinese investors, behind only the United Kingdom, Sweden, Germany, Luxembourg and France.

Within that framework, last year during the visit to Spain of the Chinese president, Xi JinPing, Spain and China signed about twenty commercial, institutional and cultural agreements.

Various of these business agreements were signed between Spanish and Chinese companies in the construction sector. As a significant result of this commercial cooperation program, in April 2019, one of the largest construction materials companies in the world, Asian giant China National Building Material, completed its purchase of the facilities of a Spanish solar panel manufacturer, with the intention of establishing its European headquarters in Spain.

The purchase price of this industrial complex of 34,000m^2 of warehousing and office space amounts to around EUR 7 million, a figure that is only the tip of the iceberg of a much more ambitious project.

Moreover, the giant Chinese construction company has partnered with a Spanish company specialising in construction technologies to produce light steel structures and prefabricated panels in its Spanish facilities to construct industrialised households/houses in southern Europe.

In fact, the two partners plan to immediately invest EUR 15 million in developing the entire complex to be able to manufacture components in accordance with new technical specifications, which will allow them to reduce time and costs and maintain new standards of sustainability and energy efficiency.

However, whilst we are still awaiting the results for the second half of 2019, Chinese investment in Spain saw a dramatic drop of 99% to around EUR 8.8 million in the first half of the year, compared to EUR 975 million in the first half of 2018. The main reasons for the decline in operations of Chinese investors in Europe seem to be capital controls introduced by the Beijing Government, trade tensions with the U.S. and the increasing scrutiny on Chinese investments in the main recipient countries.

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Madrid Nuevo Norte

Following 25 years of negotiations, in July 2019 Madrid City Council unanimously approved the urban regeneration project, “Madrid Nuevo Norte”. Covering a total of 3,290,204m², the sheer scale of the project is indicative of the great opportunity it represents for the city of Madrid.

The project envisages the construction of 10,500 private dwellings, and the transformation of Chamartin station, making it the largest transport hub in the city, as well as the creation of three new Metro stops on Line 10 and the remodelling of the road network of the Northern area of Madrid (with the aim of minimising traffic jams).

The plan includes a new centre of commerce spread over 1,000,000m², accounting for 60% of the new construction.

Among the 348 new buildings, three new skyscrapers containing offices will be added to the city’s skyline: one of them will be over 300m high and will have approximately 70 floors, making it the tallest building in Spain. In addition, there will be 500,000m² of green space, amongst which will be a large park covering 120,000m².

This urban regeneration project is being sponsored by private partner, Distrito Castellana Norte (**DCN**), a consortium of BBVA bank (75.5%), the real estate company, Merlin, (15.5%) and the construction company, Grupo San José, (10%), and will be overseen by Madrid City Council for the duration of the construction works.

The public authorities involved will jointly invest EUR 2,452 million in the project and they expect to ultimately receive revenues of EUR 3,762 million.

The current team leading the project at Madrid City Council estimates that work will commence at the end of 2020 and will be carried out in various stages, completing in 2045.

This gigantic operation to transform the Northern area of the Spanish capital will involve more than EUR 6 billion and 20 years’ worth of investment in redevelopment, infrastructure and urbanisation.

Spanish justice system awards highest compensation to asbestos victims to date

The Court of Madrid has awarded the highest amount of compensation in Spain to date for exposure to asbestos, a carcinogenic material widely used in construction in the 20th century and causing serious respiratory diseases.

In total, the Uralita company, which used the carcinogenic mineral to produce fibre cement, will be required to pay EUR 3.5 million to 14 people for exposure to this mineral. The victims were all people who were indirectly exposed; whether domestic exposure – for example, families who washed the clothes of the workers of the company where asbestos fibres were embedded; or environmental exposure - for example, neighbours who lived near the factory.

Asbestos was extensively used during the 20th century as a building material to mount roofs and cover pipes and gutters. And although its harmful effects had been known about since the 1940s - it can cause asbestosis, pleura and lung cancer - it was not until 1977 that the World Health Organization (**WHO**) considered it to be a carcinogen, and in Spain its use was not prohibited until 2002. The Uralita factory, one of the biggest asbestos factories in the country, remained active until 1997.

In this latest decision, the Court of Madrid referred to, and upheld, precedent case law (from 2013 and 2016) to attest to the impact on health of this mineral and the responsibility of the company:

> “They used asbestos despite knowing since the 1940s that it compromises the health of its workers ... It was a risk that also reaped financial reward for the company. Although it has been proven that the company complied with the regulations in terms of health and safety, it is obvious that the measures adopted have not prevented harm from occurring.

There is still a large amount of asbestos throughout buildings and infrastructures in Spain – such as the Madrid Metro - which needs to be identified. It was thought that it was only harmful when broken, but we know now that if it degrades due to age or weather, it is also harmful. That degradation has already begun because the useful life of asbestos is between 30 and 40 years and its greatest use in construction occurred between the 1960s and 1990s.

It is clear that construction companies should comply with all construction regulations in place that ban the use of asbestos and should take heed of the millions of Euros they could find themselves liable for as a result of their previous use of this material. This is an important factor to be considered, for example in transactions involving construction companies, as their potential involvement in court proceedings regarding asbestos, and the potential liability they face, may significantly affect the value of these companies.

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Spain makes the most of its sunshine

An important global energy transition is now underway and many factors will determine the world's energy future. These include a fall in technological costs, an increase in institutional support and the broadening of financing options, which have all placed renewable energies – especially solar and wind energy – as the most viable foundation of the "decarbonisation" of Spanish and global energy supplies.

Particularly in Spain, with an average of 300 days of sun per year, the present and future of clean energies are understandably focused primarily on solar energy. Installation of over 4GW of capacity in 2019 (14 times more than in 2018) will see Spain take the lead in the solar market in Europe this year, a milestone that illustrates that the solar energy market in the country really has taken off.

The Spanish government has played a key role in encouraging progress by introducing the Draft of the National Energy and Climate Plan 2030 (*Plan Nacional Integrado de Energía y Clima* (PNIEC) 2021-2030). The main aim of the plan is to see renewable energy account for 42% of the country´s energy needs and 74% of Spain´s electricity needs by 2030. In effect, it represents one of the most ambitious energy plans in Europe. Accordingly, an increase in requests for grid connections and greater numbers of solar plant installations have led to a need to implement more sophisticated regulations.

Financial institutions are also supporting the renewables sector. For instance in July we saw Fotowatio Renewable Ventures sign a deal with Spanish bank BBVA to turn its credit line 'green', so as to be used exclusively for the financing of projects that promote renewable energy sources, and which will amount to EUR 60 million.

This exponential rise in the Spanish solar energy market has in turn triggered a dramatic change in the way these energy projects are being financed. One of the biggest innovations in project financing in the Spanish renewables sector occurred in July 2019 when Renovalia, a Spanish company specialising in the development of renewable energy, closed a financial agreement with the Spanish bank, Banco Sabadell, for EUR 29.7 million.

The agreement was geared towards the construction, commissioning and operation of five solar plants totalling 79.2MW in the south of Spain. This is the first time in the Spanish renewables sector that a developer has obtained financing from a credit entity without a buyer, and consequently, without a traditional Power Purchase Agreement (**PPA**) in place.

These so-called Merchant PPA Projects, which allow the developer to sell the electricity into the wholesale market at market price, highlight the confidence of the banks in the Spanish renewables sector. Clearly, they trust that the price fixed by the energy market will be sufficient to enable Renovalia to repay the loan.

The rapid proliferation of solar energy projects in Spain, and the actions of national and international governmental authorities, as well as credit entities, alongside innovative changes in project financing, have prompted a significant evolution and indeed revolution in the Spanish solar energy sector.

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Major projects are afoot in preparation for Expo 2020 Dubai

Expo 2020 Dubai is less than one year away, scheduled to open on 20 October 2020, and is the first World Expo to be held in the Middle East and Africa.

The Dubai Expo is a truly international event, where a record 192 countries will participate to share with the world details about their countries, with an emphasis on their future innovations. With a reported budget of AED 33 billion invested in infrastructure and construction, it is expected to attract 25 million visitors to Dubai, whilst generating an estimated AED 122.6 billion for the UAE economy between 2013 and 2031.

In preparation for Expo 2020, Dubai will add new attractions to its already impressive real estate portfolio and showcase its architectural and construction achievements. Three key projects that will be unveiled in 2020 include:

- Al Wasl Dome – the centrepiece and 'jewel of the Expo', Al Wasl Dome is positioned to be the largest 360 degree projection surface in the world and the next major construction landmark in Dubai. The crown of the Dome, which alone weighs 550t, was lifted into place on 18 September 2019. The structure now stands at 130m wide by 67.5m tall and required 13,600m of curved steel. To put this into perspective, the length of steel required is equivalent to the height of 16 Burj Khalifas. Al Wasl Dome will be the central hub of the Expo and host various experiences and events throughout it
- UAE Pavilion – resembling the UAE's national bird, the falcon, this architectural feat will be the largest pavilion at the Expo spreading over 15,000m^2. It will host exhibitions showcasing Emirati culture and achievements. Each participating country will also have their own national pavilion representing one of the sub-themes of the Expo: Opportunity, Mobility and Sustainability. All pavilions are planned to be constructed by July 2020
- Dubai Exhibition Centre – with 45,000m^2 of space, the conference and exhibition centre will be a state of the art facility and provide multi-purpose halls and VIP meeting rooms during and after the Expo. The centre is expected to attract international businesses and encourage a knowledge based economy - one of the pillars of UAE Vision 2021

After the Expo, all three projects will form a key part of District 2020 – a strategic plan to reuse 80% of the Expo infrastructure to create a mixed use development – which will include residential buildings, offices, and green spaces. The redevelopment of the Expo site will see approximately 86 buildings converted into residential and commercial properties. The works are planned to commence following the closure of the Expo 2020.

Ground Breaking UAE Business Reforms to Foreign Ownership

A core goal of the UAE government in recent years has been to strengthen the country's attractiveness to foreign business. In light of this, the government has been focused on reforms to relax foreign ownership restrictions on companies and other entities established in the UAE.

Historically, in the majority of cases, foreign investors could only own up to 49% of the shares in a company incorporated with limited liability in the UAE (unless, for example, the company was incorporated in a designated free zone in which 100% foreign ownership is permitted). The other 51% or more of the shares in the company were required to be owned by a UAE national or a company that is wholly owned by UAE nationals.

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The Foreign Direct Investment Law 2018* (**FDI Law**) introduced a framework for the UAE Cabinet to increase the proportion of permitted foreign ownership of UAE companies. The FDI Law made clear that any relaxations would be sector based, and relate to specific activities. These sectors and activities would be set out in a 'positive list'.

On 2 July 2019, through an official press release and social media channels, the UAE government announced that the Cabinet had passed a Resolution specifying the contents of the positive list. A total of 122 economic activities across 13 sectors were identified, including construction, renewable energy, agriculture, manufacturing, transport and storage.

In general, the authorities within the different Emirates are authorised to determine the permitted level of foreign ownership and other specific requirements (for example, any minimum share capital or Emiratisation requirements), on a case-by-case basis. At the time of writing, the relevant authorities have not yet published their guidance or requirements in this respect.

In some cases, it appears that certain specific minimum requirements will need to be satisfied for increased levels of foreign investment to be approved. For example, in relation to construction, the version of the positive list that is in circulation indicates that increased levels of foreign ownership may only be permitted for companies involved in "...infrastructure projects of a wide scale such as airports, highways, sports facilities and projects with value exceeding AED 450 million".

The Cabinet Resolution setting out the positive list has not yet been formally published in the UAE's Official Gazette.

As the scope of the positive list under the FDI Law is more widely understood (and potentially increased), we envisage that increasing numbers of foreign investors will seek to take greater control over the shares in their UAE based entities. The UAE is one of the most active construction markets in the world and, if it applies to construction, the FDI Law may well provide further incentive for our global construction company clients to invest.

*Decree Law No. 19 of 2018

Improving Cash Flow in the Abu Dhabi Construction Industry

The Executive Council of Abu Dhabi has acknowledged the difficulties experienced due to non-payment to contractors and suppliers throughout construction projects in the United Arab Emirates (**UAE**).

Cash flow is critical during the course of a construction project: failure to pay main contractors prevents payment further down the chain to key suppliers and sub-contractors. Without the necessary funds, availability of works and products provided by those sub-contractors and suppliers can be affected, resulting in severe delays to projects.

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On 26 March 2019, the Executive Council issued a circular to government departments and state-owned companies in the Emirate of Abu Dhabi, ordering that:

1. All payments due to contractors and suppliers must be made no more than 30 days following receipt of the relevant invoice; and
2. Contracts must include a clause obliging contractors and suppliers to pay their sub-contractors within 30 days of receiving sums due from government departments and state-owned companies.

These requirements were introduced with retrospective effect. Accordingly, they must be reflected in all contracts entered into with contractors and suppliers prior to the date the circular was issued, in addition to all new contracts.

The Abu Dhabi government further announced that, in circumstances where part of an outstanding sum is in dispute between the parties, the undisputed part must be paid - such payment does not constitute a waiver by either party of its rights, until an agreement as to the outstanding amounts is reached in accordance with the contract.

While there do remain a number of uncertainties, the new requirements are very much welcome at a time when contractors and suppliers in the UAE are increasingly feeling the strain of reduced liquidity and cash flow. It is anticipated that these requirements will prevent funds getting stuck at source and ultimately encourage cash flow down the supply chain.

New Government Tenders and Procurement Law in Saudi Arabia

A new Government Tenders and Procurement Law (the **New GTPL**) came into force on 1 December 2019.

In step with the Saudi government's multi-billion dollar 'Vision 2030' infrastructure program, the New GTPL will have a direct impact on the economic attractiveness of the Saudi infrastructure market to international contractors and consultants.

Old GTPL

The Old Government Tenders and Procurement Law (the **Old GTPL**), applicable since 2006, imposed a strict regime on public tendering and procurement, and is, arguably, not fit for purpose, given the scale and complexity of Saudi Arabia's current and future infrastructure needs.

Its key features included that it:

- Applied to all appointments by government entities;
- Required that standard form contracts (e.g. the Public Works Contract) be used on all government projects;
- Overrode any inconsistent contract terms on government projects (e.g. restrictions on variations that increase contract price by more than 10% and a delay penalty scheme of 10% of the contract price);
- Only allowed for a departure from the strict requirements of the Old GTPL with a specific exemption from the Royal Court; and
- Required mandatory referral of disputes to the Board of Grievances within the Saudi Court system.

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New GTPL

The key features of the New GTPL include that it:

- Applies to all appointments by government entities (the same government entities as under the Old GTPL);
- Provides for centralised tendering (e.g. a designated Central Entity may request tenders for works it deems to be required by more than one government entity);
- Provides for centralised contracting (e.g. the Central Entity may engage contractors / consultants on the basis of framework agreements and/or prepare its own contract forms);
- Removes the need for full public tender in certain circumstances
- Creates a mandatory standstill period for 5 to 10 days after a tender decision is made, to allow unsuccessful bidders to raise any objections to the tender process;
- Introduces various new requirements for contract forms (e.g. Arabic or dual language contracts);
- Maintains the same restrictions on variations (i.e. variations remain capped at 10% of the contract price);
- Increases maximum delay penalties to 20% for works and services contracts;
- Introduces new provisions concerning the mandatory or discretionary termination of contracts by a government entity; and
- Requires the referral of disputes to the Board of Grievances, however government entities may agree to arbitration upon approval by the Minister of Finance.

Remarks

The increased focus on centralised processes is set to promote greater transparency, predictability and efficiency in tendering. Similarly, the New GTPL will lead to better infrastructure outcomes by providing Government Entities greater flexibility to tailor contract conditions (e.g. beyond the Public Works Contract) to particular project requirements.

On the whole, the New GTPL heralds a more favourable market environment for international contractors and consultants seeking to be appointed on government projects, which can only benefit Saudi Arabia's ambitious infrastructure program over the coming years.

Qatar beyond the 2022 World Cup: the 2030 Vision

With excitement about the 2022 FIFA World Cup rising, and the infrastructure surrounding the event nearing completion, those within Qatar are also considering what comes after the final whistle has been blown at the final on National Day (18 December 2022). Those plans are being guided by the 'Qatar National Vision 2030'.

The Qatar National Vision 2030 is divided into four pillars: Economic Development; Social Development; Human Development; and Environmental Development.

In terms of Economic Development, the business landscape is also evolving. The Qatar Financial Centre is continuing to develop, and it will now be joined by the Qatar Free Zone, soon to be operational. It is hoped that the lessons learned by these 'laboratories' of business may be transferred to the wider economy.

Social Development, whereby the government is seeking to enrich Qatar's sense of community and citizenship, has been given a boost this year by the opening of the National Museum of Qatar, a stunning piece of architecture resembling a desert rose. Laws are being passed to abolish the *kafala* (or sponsorship) system, and improve worker welfare. These initiatives have been fostered by Qatar's continued co-operation with the International Labour Organisation.

Health and education are the main focuses in the Human Development sphere. Qatar is looking to increase its native population by increasing the resources available, such as hospitals and schools, as well as by more subtle means, such as improving road safety.

The infrastructure boom will need to outlast the World Cup in order to achieve Environmental Development. Adding a 'Blue Line' to Doha's new metro system is being mooted, alongside a spectacular looking 'Sharq Crossing' – a series of bridges and tunnels which bisect Doha Bay – making it easier for road traffic to travel from the north to the south of Doha. Food security will also be a priority, with Qatar now at the point of exporting some of its dairy produce, and with techniques for farming more fruit and vegetables in development.

Overall, maintaining the legacy of the World Cup, together with the frenetic pace of development to build upon it, in an ever developing business culture, will keep Qatar expanding as it seeks to achieve its national vision in 2030.

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Pay now, arbitrate later?

Many standard form construction contracts contain multi-tiered dispute resolution provisions, which often provide for disputes to be referred to adjudication in the first instance. The purpose of adjudication is to allow disputes to be resolved in a quick and informal manner, "essentially a cash flow measure implementing what is colloquially described as a quick and dirty exercise to avoid delays in payment pending definitive determination of litigation". Adjudication clauses therefore often provide that the Dispute Adjudication Board (**DAB**) is required to give a decision within a short period of time. These decisions are intended to be binding and enforceable, although not final, until overturned or revised by way of settlement or arbitration.

A party aggrieved by a decision of a DAB is not left without a remedy and is entitled to submit a notice of dissatisfaction, usually within a certain period of time, and to refer such dispute to arbitration or litigation. The notice of dissatisfaction does not, however, diminish the duty of complying with the DAB's decision. The only difference between the situation where a notice of dissatisfaction is filed and where one is not, is that the DAB's decision is binding but of an interim nature, while in the latter it is binding and of a final nature.

This has long been the accepted positon in South Africa and has been supported by the courts in a number of cases, including *Radon Projects (Pty) Limited v NV Properties (Pty) Limited* and *Another, Tubular Holdings (Pty) Ltd v DBT Technologies (Pty) Ltd* and as far back as 1993 in *Stocks & Stocks (Cape) (Pty) Ltd v Gordon and Others NNO*.

It is also worth recalling the proposed Construction Industry Development Board's Prompt Payment Regulations and Adjudication Standards, which are aimed, inter alia, at improving the cash flow problems experienced in the construction industry, and in particular that these Regulations proposed statutory adjudication of certain disputes. Amongst others clause 26K(3) of the Regulations, stated that the decision of the adjudicator would be binding and that the parties to a contract must give effect to that decision, even though one or more parties intends to request arbitration. Although the advancement of these Regulations came to a standstill, such legislation (which is similar to legislation in the United Kingdom, Australia and Canada), shows the purposes and intention of DAB decisions.

Despite all of this, there has been a worrying trend in recent judgments delivered by our High Courts, where the courts have in effect been finding that DAB decisions need not be enforced where a notice of dissatisfaction has been delivered, which is contrary to the well-established precedent and principles referred to above.

Some of these decisions are currently pending before the Supreme Court of Appeal (**SCA**), and it is hoped that a decision from a higher court will provide certainty on the matter.

In summary, if decisions made by a DAB are considered unenforceable, their intended role would be rendered futile. The very purpose of adjudication would be defeated if a party, armed with a DAB decision obtained within a short period of time, is required to wait for the outcome of an arbitration in order to be able to enforce its rights under such decision.

At a time when the construction industry is at a low ebb and cash flow is generally restricted, it is hoped that the SCA will restore certainty to the position, and uphold these domestically and internationally accepted principles.

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South Africa's 10 year energy roadmap

On 16 October 2019, the South African government announced its long awaited, revised Integrated Resource Plan (the **IRP**), which provides the vision for the energy sector over the next ten years. Below we provide a summary of the details of the IRP along with some key takeaways.

What is the importance of an IRP?

An IRP's purpose is to address how a country will meet its future electricity needs. It provides an indication of a country's forecast and current electricity demands and outlines budgets and strategies needed to meet these demands. IRP's are also significant for investment purposes as they act to support the value of investment, provide price transparency for consumers, and further provide a basis for potential partnerships.

In brief - what does South Africa's revised IRP contain?

South Africa's IRP aims to increase capacity in the country by 30GW - with 25GW of this additional capacity coming from renewable energy sources. Overall, however, the IRP proposes the use of a diversified mix of energy sources across renewables, coal, nuclear, gas and other sources. It is intended that the IRP will be a 'living plan' which will be regularly reviewed and updated based on market trends.

The IRP aims to reduce South Africa's reliance on coal as an energy source, which currently accounts for over 80% of South Africa's power generation. South Africa has a number of coal-fired power stations that are reaching the end of their design life and, as a result, the IRP has been prepared to rebalance this equation.

The IRP projects that by 2030 only 59% of electricity will be generated from coal, bolstered instead by solar and wind power at 18% and 6% respectively.

Hydro plants will contribute an additional 8%, alongside nuclear power contributing 4.5%, with the remainder being obtained from natural gas and diesel projects.

The energy source that the IRP most focusses on to achieve this planned rebalance is wind power. Wind power is highly attractive to the South African government due to its consistent yield of energy production, which is vital in helping South Africa to alleviate its tight energy supply margin. Other renewable sources, such as solar and hydro, are unable to provide such consistent yields because of the seasonal capacity shortages that particularly affect them. As a result, South Africa has focussed on wind power as the asset to help to resolve these issues.

The other main aim of the IRP is to allay investors' concerns regarding Eskom - the country's national electricity utility. Central to this is the plan to 'de-bundle' Eskom by 2022. The IRP sets out that Eskom will be split into three companies with one focussing on power generation, another transmission and the third distribution.
It is hoped that this will provide greater transparency and accountability for stakeholders in the energy industry. However, the IRP also recommends a power purchase programme from independent power producers (**IPPs**) to mitigate Eskom's reduced performance.

The previous IRP issued in 2010 gave rise to the successful renewable energy independent power producer procurement scheme (REIPPP) which contributed almost USD 20 billion of direct investment into the economy, and caused average price drops in wind and solar tariffs, as well as seeing the award of 92 projects to renewable IPPs.

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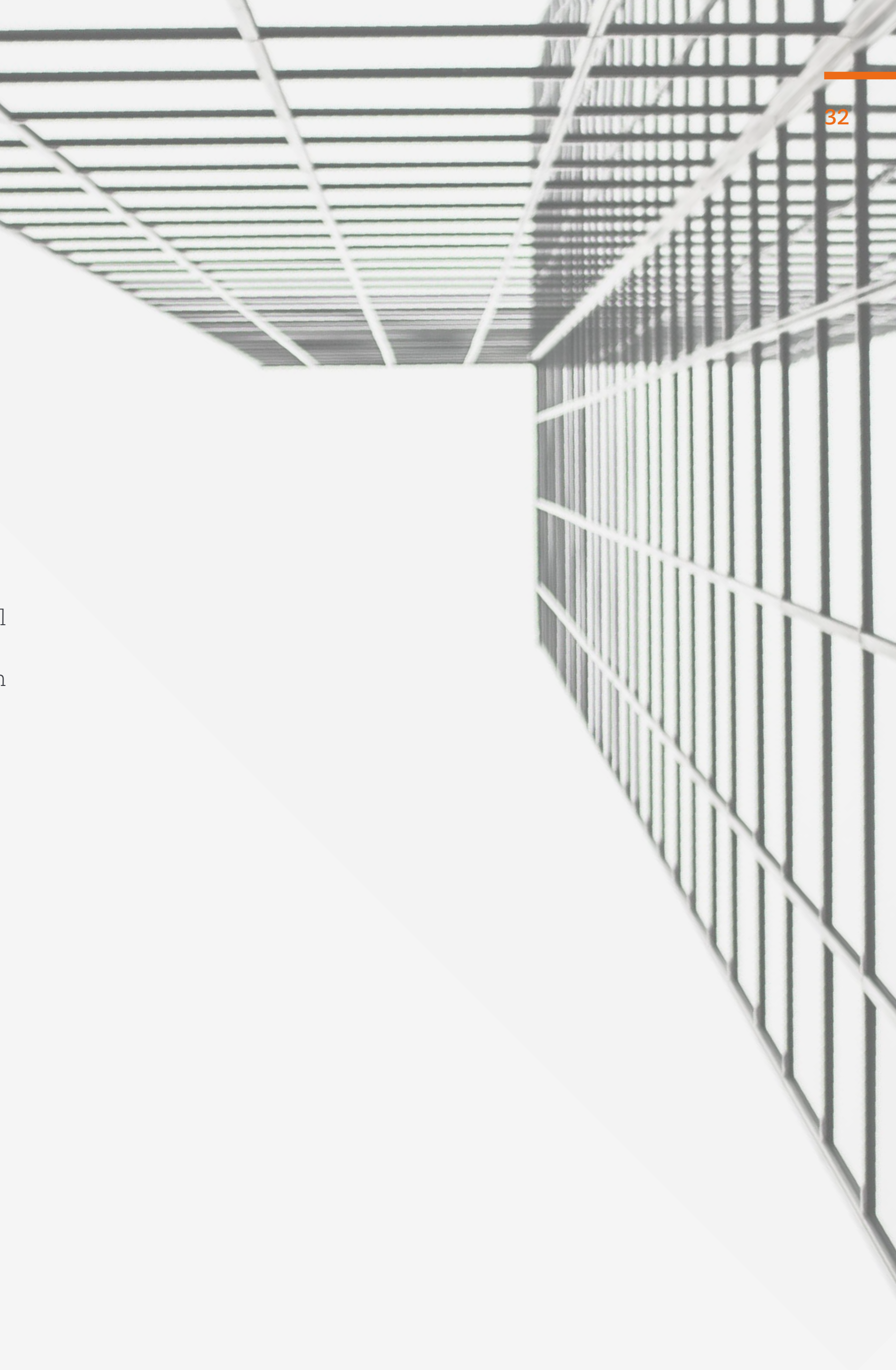
The IRP does also enforce annual build limits on projects associated with each of these energy sources in an attempt to create balanced development across the industry and ensure no single stakeholder is left behind. It should be noted, however, that these limits, whilst approved, have not been finalised as yet, because they are dependent on the approval of a 'just transition plan' to ensure the negative social impact of decommissioning coal-fired power stations is minimised.

Takeaways

The following is a non-exhaustive list of the key takeaways that come out of the revised IRP:

- There is a need for the IRP to be a 'living' document that is amended continually to reflect the status of the market has been reiterated;
- The IRP recognises the need for a diverse energy supply from a variety of different energy sources;
- South Africa is looking to increase its reliance on renewable energy sources, in particular wind power;
- There continues to be an annual build limit in force to ensure harmony among stakeholders in the industry; and
- Eskom is to be de-bundled into three separate companies focussing on distinct aspects within the energy sector.

There is likely to be an opportunity for IPPs to enter into new power purchase agreements with the South African government in order to prevent the power shortages that are anticipated as a result of Eskom's continued struggles.



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The climb to a more developed Tanzania

Tanzania's vision is to become a dynamic, efficient and competitive semi-industrialised middle-income country by 2025: a country that can undertake infrastructure projects of any magnitude and participate effectively in providing services in the regional and global market place. Business Monitor International (**BMI**) reports that Tanzania is expected to experience healthy economic growth underpinned by infrastructure development and a strengthening consumer base: BMI estimates economic growth to average 6.2% between now and 2026.

Tanzania's Gross Domestic Product (**GDP**) was USD 57.4 billion in 2018, making it the 3rd largest economy in East Africa after Kenya and Ethiopia, and the 7th largest in Sub-Saharan Africa.[1]

Construction and transport have continued to maintain their position as Tanzania's top contributors to economic growth. In the following short articles, we take a closer look at the importance of investment in, and the development of, construction and infrastructure on Tanzania's development.

The impact of construction and infrastructure projects on Tanzania's development

Tanzania continues to face obstacles to the achievement of semi-industrial status. The challenges are numerous, closely related and at times self-reinforcing - they all revolve around the axis of investment and the business environment and climate.

However, the economic reforms carried out during the past decade have attracted a significant increase in private sector investors. In this sense, Tanzania continues to be an attractive investment destination, with abundant economic opportunities.

In seeking to drive Tanzania towards a modern economy, a significant portion of the government development budget has been spent on implementing various infrastructure projects at an accelerated pace to support Tanzania's vision.

Two projects that especially stand out are the construction of the central Standard Gauge Railway (the **SGR**) and the Selander Bridge.

- Construction of the SGR
  Tanzania plans to spend USD 14.2 billion over the next five years on building the 2,561km railway connecting its main port of Dar es Salaam to landlocked neighbours, including the Democratic Republic of Congo (DRC), Rwanda and Uganda

  The project will improve transport services, facilitate the movement of goods (forestry, livestock, and minerals) and allow the free movement of people within, as well as to and from, the neighbouring countries

1 https://www.tanzaniainvest.com/economy

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Additionally the project will enable Tanzania to be a trade and logistics hub in the Great Lakes Region, and will contribute positively to its ability to meet increasing demand for a reliable transport system and an improved domestic supply network[2]

– Selander Bridge
The 6.2km Selander Bridge in Dar es Salaam will link the area of Aga Khan and the Indian Ocean beach front. The project is behind schedule but is expected to be completed in 2021. The 180 tonnage capacity bridge will carry an estimated 55,000 vehicles per day and is expected to greatly reduce traffic congestion on the busy Ali Hassan's Mwinyi road and enhance the transport sector

The bridge will cost USD 126.26 million, the funding for which has been provided by a concessionary loan from the Republic of Korea through its Economic Development Cooperation Fund (EDCF), which will cover 82.9% of the cost, whilst the Government of Tanzania will fund the remaining 17.1%[3]

Tanzanian budget elevates the construction and infrastructure sectors

Tanzania is investing heavily in public infrastructure projects as it seeks to profit from its long coastline and upgrade its ageing railways and roads to ensure it remains a key node in the growing network of economies in east and central Africa.

The government is committed to increasing and strengthening domestic revenue collection to fund the development of Tanzania's economy.

The 2019/2020 budget exemplifies this, highlighting that out of USD 5.3 billion (37% of the total budget) set aside for infrastructure development expenditure, USD 4.25 billion is from internal sources, with only USD 1.1 billion from external sources.[4]

The main theme of the budget, "Building an Industrial Economy for Stimulating Employment and Sustainable Social Welfare", focuses on continued efforts to build a foundation for an industrial economy that will in turn create more employment opportunities, and stimulate economic growth and sustainable social welfare, so as ultimately to eradicate poverty, ignorance and diseases.[5]

2 https://constructionreviewonline.com/2019/02/construction-of-dar-moro-standard-gauge-railway-in-tanzania-at-46/
3 https://constructionreviewonline.com/2018/07/tanzania-to-commence-construction-of-the-new-selander-bridge-in-dar-es-salaam/
4 https://af.reuters.com/article/tanzaniaNews/idAFL8N20Z4FL
5 https://breakthroughattorneys.com/tanzania-budget-year-2019-2020/

The budget highlighted the key priorities for 2019/2020, which are:

– Strengthening and constructing a modern infrastructure system in order to enhance the national productive capacity in key industries, utilising locally available raw materials and delivering quality services to Tanzanian citizens. This is aimed at increasing domestic, regional and international trade;[6]

– Addressing challenges stipulated in the 2018 Blueprint for Regulatory Reforms to Improve the Business Environment;[7]

– Strengthening the agricultural sector (increased productivity and markets for crops, livestock, fisheries and forestry), given the importance of the sector in the national economy (food, employment, individual income, contribution to FOREX earnings and the links between this sector and industrial development);[8] and

– Maintaining national peace and security, and building a foundation for economic self-reliance.[9]

Historically, Tanzania had a high aid dependency, but this has been addressed by an improved local income collection system leading to increased domestic revenue in the form of taxes.

However, aid continues to finance nearly one-third of all public expenditures (corresponding to almost 8% of Tanzania's GDP).

This may change significantly over the next decade as recent national budgets aim to support the government's efforts to widen the tax base and strengthen domestic revenue collection. This commitment is evidenced in the government's policy measures which are geared towards strengthening tax administration laws to address the challenges posed by tax evasion and tax revenue leakages, as well as improving the provision of education to tax payers.[10]

Impact of sector policies on the development of construction and infrastructure

The Ministry of Industry, Trade and Investment published a Blueprint for Regulatory Reforms (the **Blueprint**) in May 2018 to improve the business environment. The Blueprint elaborates in detail on challenging areas of policy, law, regulation, and tax that require reforms aimed at reducing the cost of doing business in Tanzania. The issues identified range from delays in the issuance of licences and permits, to conflicting agency mandates that have at times suffocated the growth of business and constrained the flow of new investments.[11]

6-9 Ibid

10 https://um.dk/en/danida-en/strategies%20and%20priorities/country-policies/tanzania/current-and-future-challenges-and-opportunities-in-tanzania/

11 Blueprint for Business Environment Regulatory Reforms

The government has prioritised the construction sector, as various stakeholders in the sector continue to call for a solution to the bottleneck issues they experience. As the government looks to put into operation institutional and policy reforms, the focus has been on inclusive and consultative approaches to bring about changes in the business operating environment in order to win back the confidence of investors. The Blueprint seeks to address this and to minimise the amount of state intervention in regulatory decisions, as well as unclear lines of authority in decision making. As Tanzania looks to attract investment and create an industrial economy by 2025, there is a need to have clear and fair guidelines, and a regulatory regime that permits free movement of labour.[12]

The role of the Tanzania Investment Centre in increased investment

The Tanzanian Investment Centre (the **TIC**) is fundamentally pro-investor, encouraging and assisting investors, both local and foreign, to invest in Tanzania by liaising with all other relevant authorities, agencies and/or registries. The TIC is a one-stop centre for obtaining all permits, licences, visas, and land permissions for investment purposes. Registering with the TIC is not mandatory, but has its advantages such as tax exemptions e.g. 0% import duty on raw materials and 10% on semi processed goods.

The TIC also assists in linking foreign investors with other business partners through joint ventures, partnerships and other structures.[13]

The government has embarked on a review of its investment policy and laws, and is looking to boost participation by local investors.[14] Public institutions interfacing with the private sector have been identified as an important aspect in the ongoing structural and institutional reforms that are designed to improve the environment for the private sector. In this regard, the government has reviewed its regulations, focusing on removing obstacles to private sector development.

In line with this, Tanzania has established an online registration system to simplify the investment registration process, significantly reducing time and cost.[15]

Conclusion

The distribution of the 2019/20 government budget indicates that more emphasis is being placed on strengthening the infrastructure and overall business environment of the country. The Blueprint is being used to promote effective competition, whilst creating an atmosphere for economic efficiency and protecting the financial viability of business ventures. Streamlining functions of the regulators, and the current move to abolish unnecessary fees and levies, will increase compliance and reduce the costs associated with doing business in the country.

The implementation of the Blueprint and the recent efforts in addressing issues raised by the private sector, including those in the construction and infrastructure sectors, paints a hopeful picture for Tanzania and its path towards becoming one of the fastest growing economies in the East African region.

12 Ibid
13 http://www.tic.go.tz/displayListPublication
14 https://www.thecitizen.co.tz/news/Investment-policy-set-for-review/1840340-5064602-12shlw/index.html
15 https://unctad.org/en/PublicationsLibrary/wir2019_overview_en.pdf

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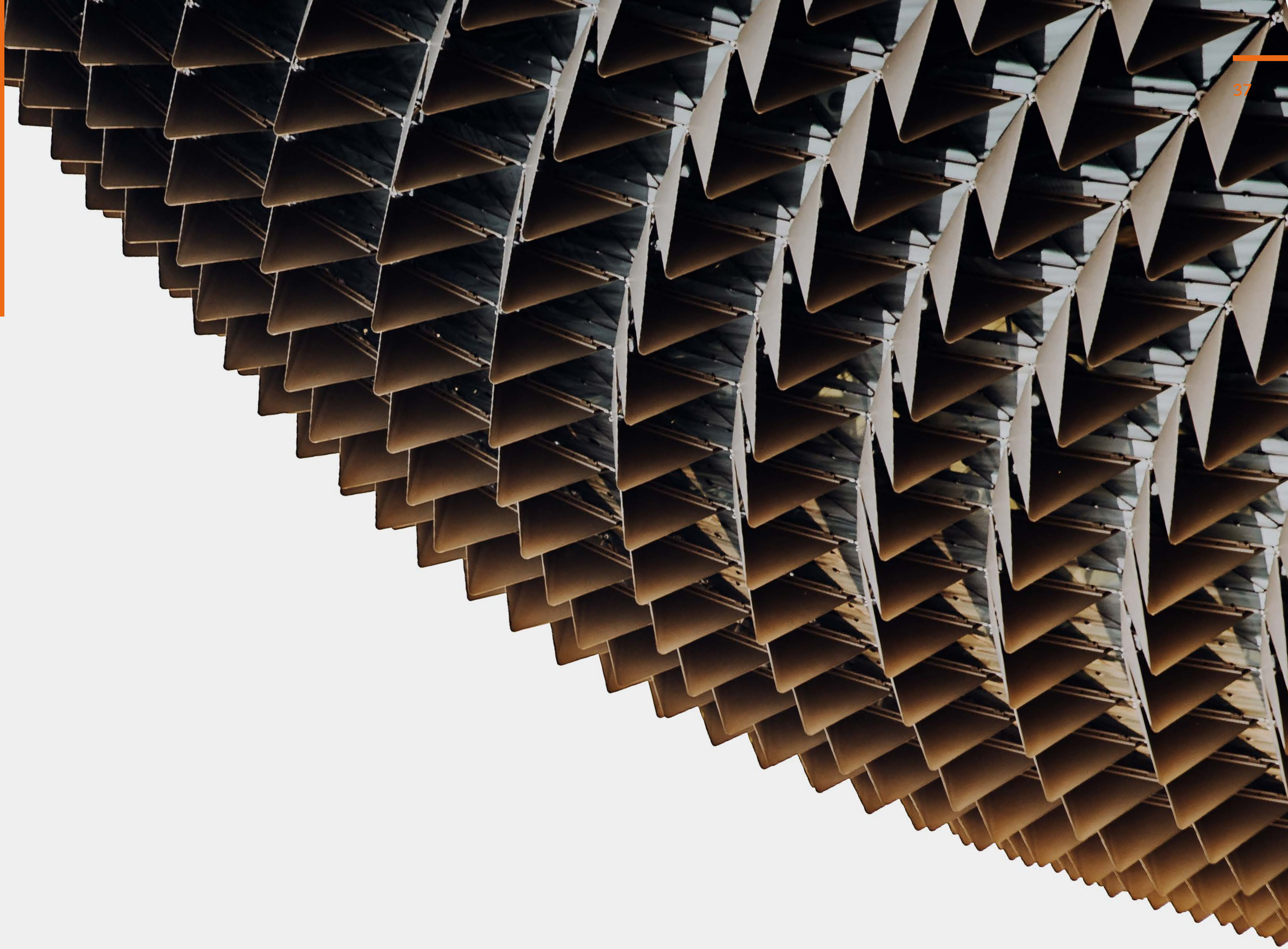

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Outbound Foreign Contractors - Trends in the Asia Pacific

From 2005 to 2014, the total revenue of the top-250 international contractors[16] increased by 36%, from USD 189.4 billion to USD 521.5 billion.[17] Engineering News-Record's (ENR's) 2019 report, however, indicates that since 2014, annual total revenue for the same group has decreased by 6.6% to USD 487.3 billion.

Despite these figures, market analysis suggests that construction spend in the Asia Pacific will be worth approximately half of the total global construction spend by 2020, with the highest growth potential and profitability being in China, Japan, Indonesia, South Korea and Malaysia.[18]

In this update, we explore how international contractors are approaching the construction market in Asia.

How is the Asian market distributed?

Since 2008, the majority of Asia's international construction market has been shared among international contractors from a handful of countries (Exhibit 1).

Exhibit 1 - Market share of top international contractors in Asia

Contractor nationality	Market share (%)		Change ratio (%)
	2008	2018	
American	14	4.9	-9.1
Australian	3.5	2.2	-1.3
Chinese	20	40.8	20.8
French	5.4	4.6	-0.8
German	24.3	9.7	-14.6
Italian	5.8	1.7	-4.1
Japanese	11.9	6.7	-5.2
Korean	5.4	10.1	4.7
Spanish	0.5	12.3	11.8

Source: ENR; Clyde & Co analysis

16 Calculated by contracting revenue from projects outside a contractor's home country.

17 The Top 250 International Contractors, Engineering News Record, August 2019.

18 Market Insights on Construction Industry in Asia Pacific, Beroe, <https://www.beroeinc.com/category-intelligence/construction-industry-asia-pacific-market/>

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What has shifted the distribution of the market?

A combination of government partnership and domestic experience has led to Chinese, South Korean and Spanish contractors leading the market.

The expansion of Chinese contractors internationally, for example, corresponds with the Belt and Road Initiative (**BRI**). BRI incentivises the contracting of Chinese contractors through access to long-term, low-interest loans from China's State-owned banks.

South Korean contractors are similarly using a whole-country approach. At the 2018 ASEAN Summit, South Korean President Moon Jae-in stated that Korea's smaller companies, financial institutions and government must support its international contractors in winning contracts abroad.

Moreover, South Korean contractors are differentiating themselves through their leading technology solutions and smart construction. President Moon cited the example of the Korean-constructed MRT lines in Singapore, where uniquely designed integrated transport depots save about 44 hectares of land space.

Spanish contractors are aggressively pricing their services and overtaking international competitors. Intense local competition has generated expertise in rail and road projects, allowing contractors to maximise profit margins and price competitively.[20]

19 Business booms for South Korean construction firms in Asean: Moon, *The Straits Times*, November 2018 <https://www.straitstimes.com/asia/se-asia/business-booms-for-south-korean-construction-firms-in-asean-moon>

20 Spanish invasion: Oz tunnels, roads and rail will get the Madrid touch, *The Financial Review*, December 2014 <https://www.afr.com/companies/spanish-invasion-oz-tunnels-roads-and-rail-will-get-the-madrid-touch-20141213-126r86>

Japanese Contractors – What lessons are being learned?

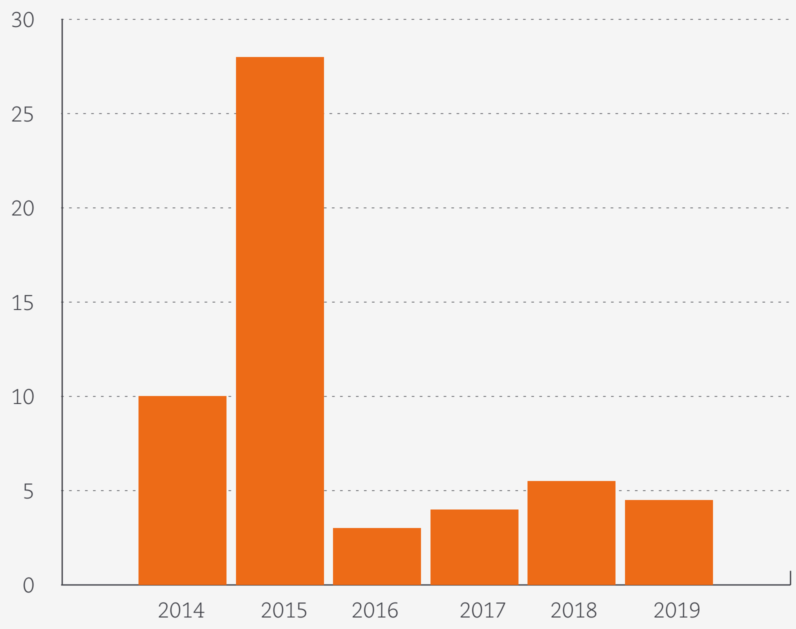
Japanese international contractors are being outcompeted internationally (Exhibit 2).

While China, South Korea and Spain are leveraging domestic expertise for international success, Japanese contractors' traditional strength in building petroleum, petrochemical and Liquified Natural Gas (**LNG**) facilities is threatened. China is competing with Japan to be the world's largest importer of LNG, and Chinese companies are becoming more integrated into the LNG market, including as construction contractors.[21]

In November of this year, the United States, Japan and Australia established Blue Dot Network—an initiative that brings together governments, the private sector, and civil society to promote global infrastructure development. Early reports suggest that Blue Dot Network is the United States' vehicle to compete with China's BRI in Asia.

The introduction of Blue Dot Network suggests that Japan wishes to replicate the success of Chinese and South Korean international contractors by using it to unify its private and public sectors in pursuit of construction projects in the Asia Pacific. If so, the Asia Pacific region is projected to increasingly involve partnerships with government and state-owned enterprises to capture a share of the construction market.

Exhibit 2 - Value of contracts received for construction abroad by Japan's largest 50 contractors (USD billion)



*as of 30 September 2019
Source: Ministry of Land, Infrastructure, Transport and Tourism (Japan); Clyde & Co analysis

21 How is China securing its LNG needs?, Center for Strategic & International Studies, January 2019 <https://www.csis.org/analysis/how-china-securing-its-lng-needs>

Hakuna MaData

A #constructiontech update

Marred by a spate of prolific recent construction crises, such as the evacuations of Sydney Opal tower, the Australian construction industry is no stranger to a raft of issues, including delays, onsite safety, and budget overruns, which have given impetus to the industry's increasing uptake of new technologies.

Update on use of current technology

Reports indicate that roughly a third of construction activities, particularly those onsite, are still using paper records. Although small, medium and large construction companies have adopted integrated software combining commonly used functions of other software products, companies are still facing technological voids in respect of site inspections, site records and sub-contractors.

Compliance remains another significant technological gap across the industry affecting all business sizes due to paper-based interactions with government, regulatory bodies, and third-party vendors in the industry.

Trends

The biggest driver of change across the industry has been touted to be the use of pre-fabricated parts (commonly referred to as off-site manufacturing), which will continue to be a force for the next few years. The use of pre-fabricated parts involves the assembling of components of a structure on a worksite or in a factory, and transporting the assembled structure to the construction site. The benefits materialising for construction businesses include reduced and controlled risk, increased efficiency, lower costs and improved quality control.

The three most prominent technological advancements being leveraged by larger construction companies have been identified as the use of the Internet of Things (**IoT**), big data analytics, and Business Integration (**BI**) platforms to streamline and enhance collaboration across a multitude of processes to ultimately achieve increased productivity and profitability.

Benefits

The aforementioned advances adopted by construction companies will allow construction teams to streamline mandatory tasks such as managing visitor and contractor sign-ins, and having visibility over onsite personnel. Companies are increasingly collecting and aggregating real-time data across projects and identifying issues such as workers' vitality indicators, the delivery and supply of equipment and weather conditions, amongst others, before they develop into calamities.

The use of BI and integrative platforms by companies will also enhance and expedite the dispute resolution process by having a single source of truth for all relevant project data.

The intersection between the law and the construction industry

Construction lawyers are required to keep up with the coalface of the industry, and understand the implications of the uptake of ever advancing technologies in the drafting or revising of appropriate contractual provisions. Technologies will have a dichotomous impact on the dispute resolution process in that, on the one hand, more and more evidence will be readily available to resolve disputes, whilst on the other hand this may have the potential unintended consequence of prolonging dispute resolution. Irrespective, lawyers need to understand and foresee the risk profiles, which the adoption of construction technologies will bring upon their clients.

Peter Mann & Anor v Paterson Construction Pty Ltd [2019] HCA 32 and Quantum Meruit (Mann)

In its recent decision in the Mann case, the High Court has departed from the longstanding position taken by the courts on the availability of restitution on a *quantum meruit* basis, providing greater certainty as to the remedy's application in circumstances where a contract is terminated by a builder's acceptance of an owner's repudiation. More fundamentally, the High Court has confirmed the contractual pricing framework as the fundamental consideration when determining the value of relief sought.

Background

The High Court appeal in Mann arose out of a residential building contract for the construction of two townhouses. The contract provided that the owners (Mann) would pay the builder (Paterson) for progress payments at various stages of the project.

Throughout construction the owners orally requested 42 variations. Although the applicable Victorian legislation, the Domestic Building Contracts Act (the **Act**), required notice to be given of both variations and acceptance of variations, the builder carried out these variations without giving notice and issued an invoice for the work. The owners refused to pay on the basis that the builder failed to comply with the notice requirements under the Act and the Act excludes the ability to claim if the notice requirements are not met. The builder considered this repudiatory, terminated the contract and brought a claim in the Victorian Civil and Administrative Tribunal (**VCAT**).

The builder's claim was upheld by the VCAT. The owners appealed to the Supreme Court, the Victorian Court of Appeal and ultimately the High Court.

The relevant issues the High Court was asked to determine were:

- Whether the Court of Appeal erred in finding that a builder who had repudiated a contract was entitled to restitution on a *quantum meruit* basis for the works carried out; and alternatively,
- If there was an entitlement to restitution on a *quantum meruit* basis, whether the Court of Appeal erred in finding that the contract price did not operate as a ceiling on the amount claimable.

Decision

The High Court made the following findings.

- *Quantum meruit* is not available for stages of work completed prior to the contract being terminated, and for which a contractual right to payment has accrued. The only recovery with respect of accrued rights is the amount due under the contract and any damages for breach of contract.
- *Quantum meruit* is available as an alternative to damages for breach of contract only in relation to uncompleted stages of work done in respect of which no right of payment has accrued at the time of termination. However, the amount recoverable should not exceed a fair value with regard to the contract price.

Implications

In the wake of the High Court's decision in *Mann v Paterson*, *quantum meruit* claims will no longer be able to be used to escape a bad deal, obtain a windfall from a losing contract or to punish a defaulting party.

Although the decision provides some greater certainty that the value of claims arising from a repudiation will be assessed with regard to the contract price, parties should nonetheless exercise great caution when considering whether to terminate on the basis of repudiatory conduct.

The Design and Building Practitioners Bill 2019 (NSW)

Preliminary insights

The draft Design and Building Practitioners Bill 2019 (the **Draft Bill**) was released on 2 October 2019 by the New South Wales (**NSW**) state government for public consultation. At this stage, the Draft Bill takes on the form of a 'framework' document and the necessary detail will be included in regulations to be drafted in 2020.

The Draft Bill responds to and incorporates key recommendations of the report of Professor Peter Shergold AO and Ms Bronwyn Weir (the Shergold-Weir Report) released in April 2018.

The Draft Bill aims to improve quality and compliance of design documentation, the build process for multi-unit, and multi-residential apartment buildings, and the accountability of designers and builders.

Key reforms

There are a number of key reforms being introduced including:

- The establishment of a registration scheme for design and building practitioners;
- Introduction of the concept of 'regulated designs' covering building elements and performance solutions for building works or building elements;
- Requirement for design and building practitioners to provide and obtain certain 'compliance declarations' from 'registered design practitioners';
- Introduction of the optional role of a 'principal design practitioner' to coordinate the provision of design compliance declarations;
- Variation requirements in respect of final designs;
- The power of the Secretary of the Department of Customer Service to issue a stop work order under certain conditions; and
- Extending the duty of care owed to land owners and subsequent land owners requiring design and building practitioners to exercise reasonable care to avoid economic loss caused by defects. Owners and subsequent owners will have a statutory right to damages for breach of this duty.

The Draft Bill applies to multi-unit and multi-residential apartment buildings and does not apply to commercial developments. Notably, it will not require the compulsory registration of design practitioners in NSW.

The framework will operate concurrently with the existing building regulatory regime requiring compliance with the Building Code of Australia (BCA), and the issue of certificates covering potentially the same building components.

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Hong Kong as the Dispute Resolution Centre of the Greater Bay Area and Internationally

In the context of the Greater Bay Area (**GBA**) scheme and the wider Belt and Road Initiative (**BRI**), Hong Kong, with its strong and independent legal system and geographic location, would be an obvious choice to be earmarked as a leading centre for legal and dispute resolution internationally. Whilst the BRI has been around for a number of years, the attention on the GBA is more recent. The GBA, on the southern coast of China, consists of Hong Kong and Macao, and the nine municipalities of Dongguan, Foshan, Guangzhou, Huizhou, Jiangmen, Shenzhen, Zhaoqing, Zhongshan, and Zhuhai, all in Guangdong Province. Totalling 56,000km^2 and with a population of over 70 million, the region has a current GDP of USD 1.34 trillion projected to reach USD 3.6 trillion by 2030.

To understand Hong Kong's place in the GBA, one should first look at the Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area (**ODP**). The ODP sets out the objectives, aims, and roles that each city will play following the implementation of the GBA scheme. On Hong Kong's role as the 'legal hub' in the GBA, the key points in the ODP are:

- Geographic Location – Hong Kong is to "…[e]stablish itself as the centre for international legal and dispute resolution services in the Asia-Pacific region, and develop into an international metropolis with enhanced competitiveness."
- Joint Platforms – A multi-faceted dispute resolution mechanism should be set up, with collaboration with Hong Kong to develop an international legal services centre and an international commercial dispute resolution centre.

The Hong Kong government likewise has set out its objective: "to refine the mechanism for international commercial dispute resolution, develop an international arbitration centre, support exchanges and cooperation amongst arbitration and mediation organisations in Guangdong, Hong Kong and Macao, and provide arbitration and mediation services to support economic and trade activities in Guangdong, Hong Kong and Macao." [22]

Hong Kong's unique advantages mean it is well-placed to act as a legal hub for disputes not only within the GBA, but throughout the Asia-Pacific region also. Indeed, Hong Kong boasts world class infrastructure for dispute resolution, having:

- A strong and independent legal system, where parties resolving disputes in Hong Kong are confident that Hong Kong's legal system is internationally recognised, judicially stable and continues to adapt and contribute to the development of the common law worldwide;
- A large number of lawyers from a wide range of jurisdictions. A review of the Law Society of Hong Kong's website on the numbers of foreign lawyers shows that approximately 1,622 registered foreign lawyers from 33 different jurisdictions operate in Hong Kong, meaning that Hong Kong is well-placed to provide foreign-related legal services to international parties; and

22 International Legal and Dispute Resolution Services, Constitutional and Mainland Affairs Bureau (The Government of the Hong Kong Special Administrative Region) <https://www.bayarea.gov.hk/en/opportunities/mainpoints-legal.html>

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- A reputable and mature dispute resolution infrastructure, which includes a number of established institutions, such as the Hong Kong Mediation Centre, the Hong Kong Institute of Mediation, the Hong Kong Mediation and Arbitration Centre, the Hong Kong Mediation Accreditation Association Limited, and the Hong Kong International Arbitration Centre.

The introduction of an online dispute resolution platform for Electronic Business Related Arbitration and Mediation (eBRAM.hk) is only expected to drive demand for Hong Kong as an international dispute resolution centre. First advocated in 2017, it is now becoming a reality with the support of the Hong Kong government. The HKD 150 million platform is expected to debut Q4 2019 or early 2020. The eBram Centre is to be a collaborative effort by the Hong Kong Bar Association and Law Society of Hong Kong and it is proposed that the platform be able to handle a wide range of services, including document submission and transmittal, and online hearings through video conference and review of documents in real time.

Notices and Valuation of Variations

A decision of the High Court in Hong Kong earlier this year, in *Maeda Corporation and China State Construction Engineering (Hong Kong) Ltd v Bauer Hong Kong Ltd*, dealt with two issues that commonly arise in the construction industry: notice provisions and valuations of variations. The case arose out of an appeal against an interim arbitral award on matters of law in relation to a sub-contract between the contractor, a joint venture of Maeda and China State Construction, and Bauer, the sub-contractor.

Notice Provisions

Bauer had encountered unforeseen ground conditions and, as a result, additional excavation was required. Under the sub-contract, Bauer was contractually required to give notice "as a condition precedent to any entitlement" if it wished to pursue a claim.

The sub-contract also set out that there would be no entitlement to any payments unless the notice provisions had been "strictly complied with".

The particular clause under which Bauer was required to give notice referred to various grounds, which included variations, and separately, unforeseen ground conditions. Bauer gave notice pursuant to the clause, but only in respect of a variation in relation to additional excavation (for which no instruction was in fact issued). Bauer failed to raise a separate notice for unforeseen ground conditions at the time. The Arbitrator decided there was no variation but that a claim for unforeseen ground conditions was made out even though notice had not been given in relation to that claim. This was on the basis that "it was unrealistic to expect a party to finalize its legal case within a relatively short period of time and to be tied to that case through to the end of an arbitration" and that Bauer's claim (at arbitration) based on the unforeseen ground conditions was not time barred as argued by Maeda.

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Chan J overturned this decision, and held that the notice for a variation (which was not instructed), was not proper notice for a claim for unforeseen ground conditions and that Bauer's claims were limited to the variation provisions only. The Judge said that Bauer "should have no right to the additional extra payment, loss and expense claimed", concluding that "on proper construction of… the Sub-Contract, the Defendant had failed to give proper notice… and that the Arbitrator's decision to allow the Defendant's claim of "like rights" was wrong in law".

Valuation of Variations

A separate question arose on appeal as to whether the Arbitrator had misdirected himself in law because, when valuing variations using a "fair and reasonable rate or price" as contractually required, he included sums in the calculation that Bauer had not actually incurred.

In essence, the issue was whether a 'fair and reasonable rate or price' should be assessed on the basis of the actual costs incurred by the sub-contractor or whether it was permissible to adopt a market rate analysis. The Arbitrator's view was that a fair and reasonable price could be arrived at by reference to the market price, without Bauer establishing its actual costs.

The Judge, having reviewed a number of authorities, declined to overturn the Arbitrator's decision. Chan J stated:

"I accept the submissions made on behalf of [Bauer], that the Arbitrator's decision on the valuation of the Variation is a mixed question of law and fact. The Arbitrator received and considered evidence from the parties and their experts on the nature of the work involved, and the costs and value asserted by [Bauer] and examined by the Experts, and concluded on all the evidence available before him that the quantification of HKD 3,991,333 represents the "fair and reasonable rate" to be decided and allowed under Clause 19.

He stated at paragraph 684 of the Award:

"Whilst it seems that Bauer did not have to pay for the items of plant during the period, I am concerned with valuation of a variation and the issue of whether a party has or has not paid for a piece of plant does not determine the issue of the value of the piece of plant. I consider that in valuing the variation it is the "cost" in terms of what it would cost which is the relevant information and that the issue does not depend on questions of payment."

On review of the authorities, it cannot be said that the Arbitrator had misdirected himself in law, or that his decision was outside the permissible range of solutions which were open to him.

In summary, this case is a salutary reminder to ensure that notice provisions should be fully complied with, in order to guarantee that claims do not inadvertently become time barred for want of proper notice and that, as far as the valuation of variations are concerned, a "fair and reasonable price" as a contractual term can be arrived at by reference to the market price without establishing proof of actual costs.

Singapore Mediation Convention: making history

The UN Convention on International Settlement Agreements Resulting from Mediation - to be known as the Singapore Mediation Convention - was signed (to much fanfare!) by 46 States in Singapore in August 2019.

The Convention facilitates the direct enforcement by States' courts of cross-border settlement agreements arising from mediation, where a party fails to comply with its obligations under such a settlement agreement.

It is hoped that this will be a 'milestone' and 'breakthrough' for cross-border mediation.

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It will enable parties to avoid the difficulties, time and cost, which can arise from first having to enforce settlement agreements by litigation or arbitration (in accordance with the dispute resolution mechanism in the agreement) and then having to enforce the subsequent judgment / award against assets in a different jurisdiction.

In short, the Singapore Mediation Convention provides a uniform international framework to enforce mediated agreements of cross-border disputes. Its aim is to give businesses more confidence in opting for mediation to resolve disputes, ultimately facilitating international trade. Reports have also hinted that disputes arising from China's Belt and Road Initiative may benefit from mediation as being a way of settling such disputes, which better reflects Asian values and is tailored to Asia's needs.

The Singapore Mediation Convention is a welcome addition to the arsenal of international instruments for the enforcement of awards, judgments, and settlement agreements arising from international disputes. Hailed as a "game-changer" for cross border mediation and mediated settlement agreements, the Singapore Mediation Convention addresses the lack of enforcement options for mediation, and will no doubt "encourage the use of mediation as a speedy, cost-saving and often relationship-preserving means of dispute settlement."

See **here** for our detailed article.

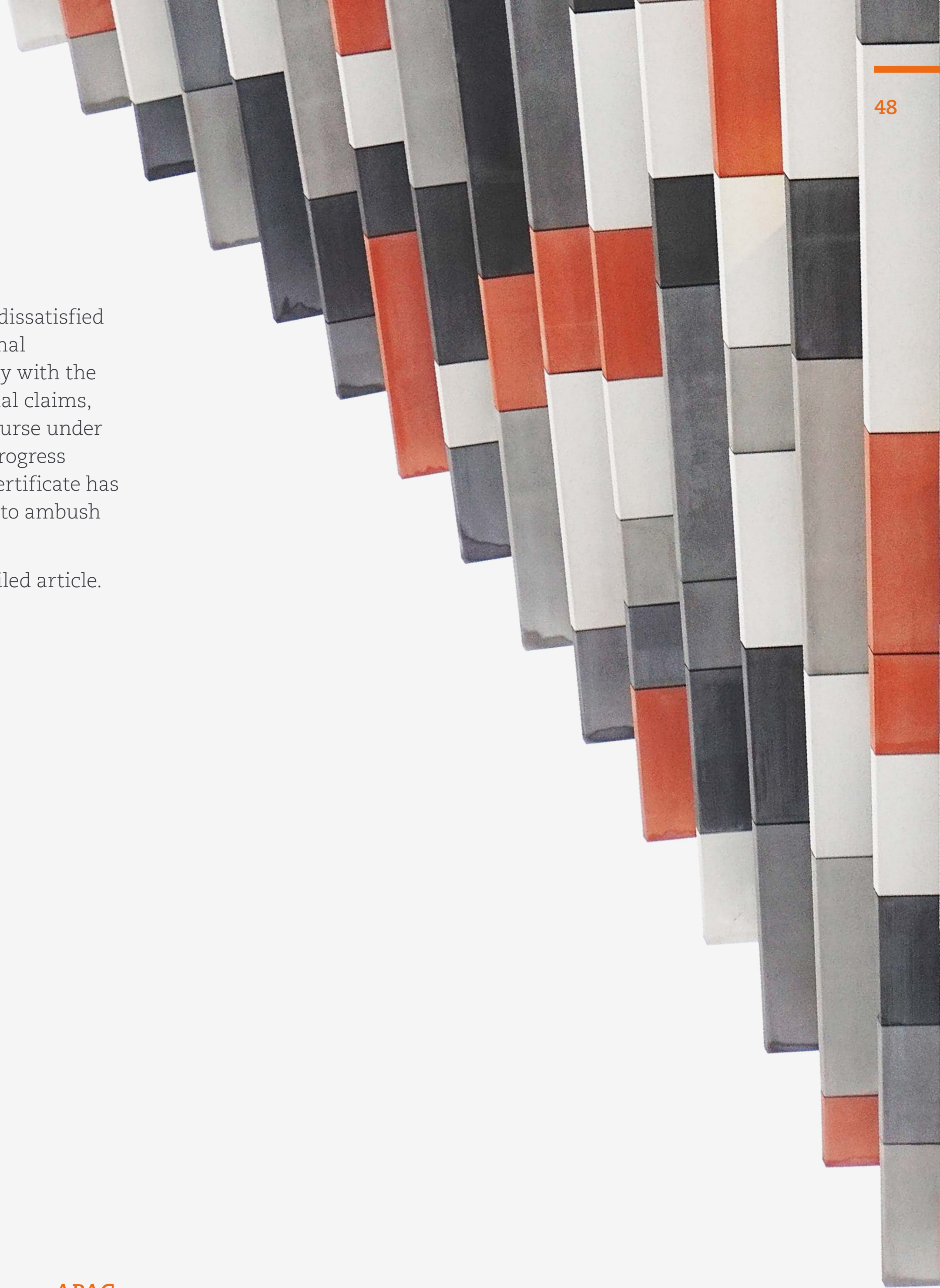
The problem of unapproved revenue

Infrastructure contracts are notorious for cost overruns. Even the best administered contracts involve adjustments to the original contract price because of variations to the scope or claims for additional cost. One of the difficulties with this is that these claims are often not resolved until a later stage in the project. This gives rise to the question of how such 'unapproved revenue' can be sensibly and realistically accounted for during ongoing projects.

The Singapore Infrastructure Dispute-Management Protocol (**SIDP**) - a protocol for the appointment of a dispute board to assist in the management of disputes between parties in mega infrastructure construction projects - was launched by Singapore's Ministry of Law in October 2018.

The SIDP is a useful dispute resolution tool that is intended to reduce or mitigate the risks of time or cost overruns that arise from disputes. It is therefore unsurprising that it attracted great attention and interest from the conference participants with much discussion from the panel and questions from the floor.

See **here** for our detailed article.



AUSTRALIA

ASIA

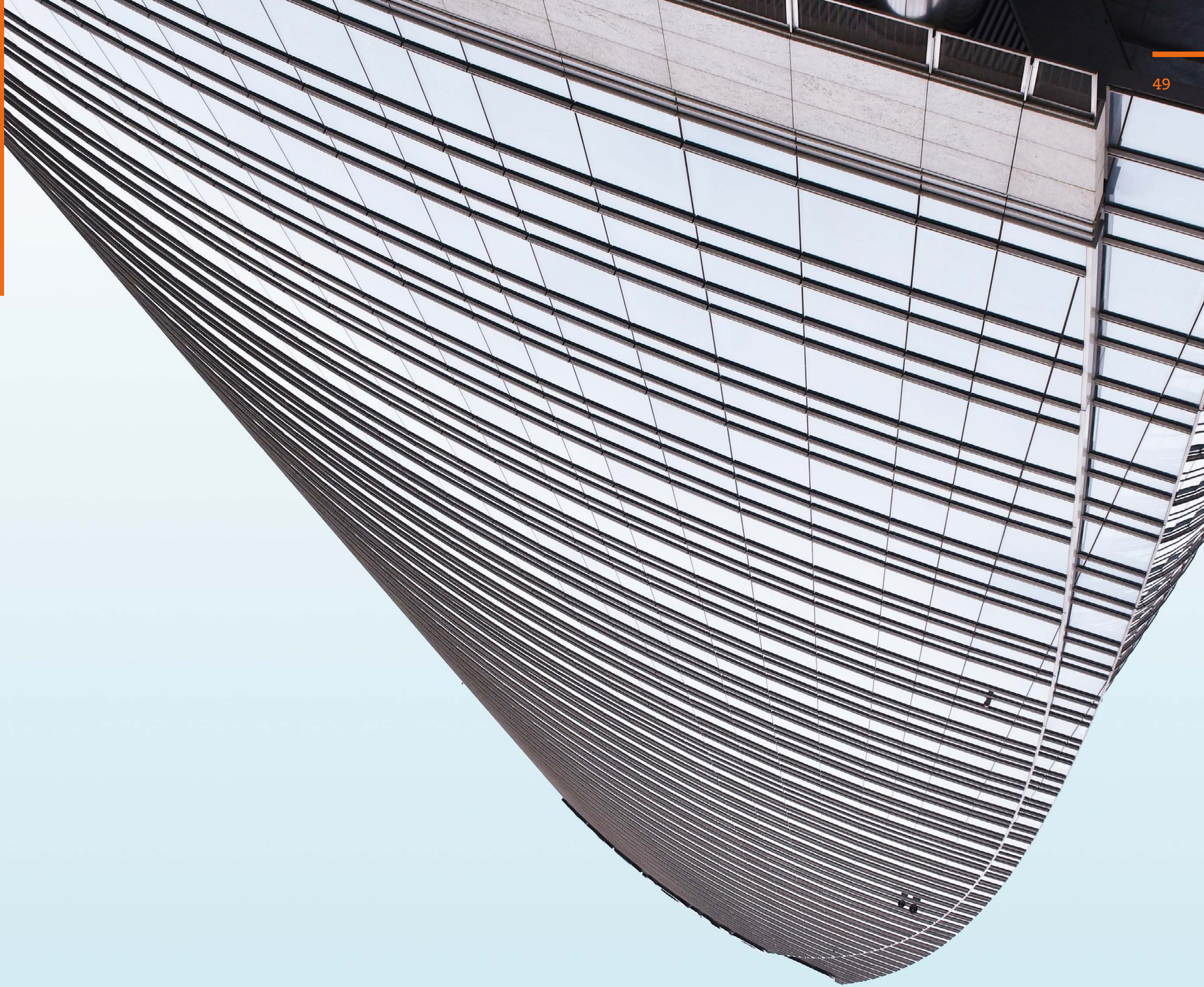
Clarification of the duty to speak in adjudication proceedings in Singapore

A recent decision by the Singapore Court of Appeals (*Far East v Yau Lee*) is being applauded for providing clarification as to the extent to which employers must raise objections – the duty to speak – to a progress payment submitted outside of Singapore's Building and Construction Industry Security of Payment Act (**SOP Act**): employers now do not need to continually respond to payment claims, which are submitted after a final certificate has been issued in accordance with the terms of a Singapore Institute of Architects (**SIA**) form of contract (**SIA Contract**) and which are thus made outside the application of the SOP Act.

Contractors who are dissatisfied with an architect's final certificate or are tardy with the resolution of their final claims, now do not have recourse under the SIA Contract to progress claims after a final certificate has been issued, in order to ambush or harass employers.

See **here** for our detailed article.

AMERICAS



USA

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President Trump Issues Executive Orders on Infrastructure

On 10 April 2019, two Executive Orders were issued that promote new energy infrastructure by removing regulatory barriers and revising the permitting process. Both Executive Orders aim to streamline the regulatory processes for building new energy infrastructure projects.

The first Executive Order directs the Administrator of the Environmental Protection Agency (**EPA**) to consult with States, tribes, and relevant executive government agencies to determine whether any provisions of EPA's Clean Water Act (**CWA**) regulations should be revised to encourage more efficient permitting, timely action on infrastructure projects, increased regulatory certainty, effective stewardship of natural resources, and to support economic growth. After consultation, the Administrator must develop proposed rules revising those regulations and then issue the new guidance to States and authorised tribes to supersede existing CWA section 401 interim guidance.

The second Executive Order directs the Secretary of State to adopt new procedures for the development and issuance of Presidential permits related to the construction, connection, operation, and maintenance of certain facilities and land transportation crossings at international borders in the U.S. Additionally, the Secretary of State was directed to adopt procedures ensuring that he or she can review an application for a Presidential permit, request additional information where necessary, consult with any interested agencies, State, tribal, or local officials or foreign governments, and make a recommendation to the President regarding the issuance of a Presidential permit within 60 days of the Secretary of State's receipt of an application for a Presidential permit.

Supreme Court Strengthens Freedom of Information Act Protection for Contractors

On 24 June 2019, the U.S. Supreme Court – in its decision in *Food Marketing Institute v Argus Leader Media*. – changed the standard applicable to the Freedom of Information Act's (**FOIA**) Exemption 4, which exempts from disclosure "trade secrets and commercial or financial information obtained from a person and privileged or confidential."

Previously, to qualify for this exemption and prevent the disclosure of information in the possession of a federal agency, a contractor was often required to show that there was a "likelihood of competitive harm to the contractor" if the information were not withheld. The Supreme Court's ruling eliminates this requirement.

While the decision should make it easier for contractors to prevent disclosure of their commercial or financial information, it also leaves unresolved whether a contractor can prevent disclosure merely by showing that the information is "customarily and actually treated as private by its owner", or whether a contractor must also demonstrate that the information was "provided to the government under an assurance of privacy".

For this reason, contractors should seek, when possible, government assurances of confidentiality when private commercial or financial information is submitted to the government, and seek legal counsel when contacted by a federal agency's FOIA office concerning the potential disclosure of such information.

Despite Bumps in the Road, the P3 Delivery Model Continues to Play an Important Role in Meeting Future Infrastructure Needs

Although public-private partnerships (**P3**) have become a leading method of delivering infrastructure in several countries throughout the world, P3s are often met with scepticism in the U.S. Even though there is an ever-growing list of P3 successes (including several multi-billion dollar infrastructure projects that were completed ahead of schedule and below budget), the hiccups are often what garner the most press.

Despite the focus on failures, the traditional infrastructure P3 market continues to grow in the U.S. (for example, USD 70 billion California High-Speed Rail, USD 50 billion Washington Sound Transit 3, USD 17 billion NY Second Avenue Subway, USD 13 billion NY-NJ Hudson Tunnel Project, USD 1.5 billion Expanded Roadway Capacity in Florida). The P3 market is also expanding into other sectors like higher education and social infrastructure (for example, State of Hawaii Entertainment District: Aloha Stadium/Entertainment District, Prince George County Public Schools, City of Honolulu Blaisdell Civic Center, Miami-Dade County Courthouse, City of Los Angeles Civic Center, Alabama Department of Corrections Prison Facilities, Dartmouth Heating Plant and Distribution System, California State University Fresno Central Heating and Cooling Plant Modernization, Travis County Civil and Family Courts Facility, Santa Rosa Junior College Student Housing, Vanderbilt University Student Housing).

The P3 model is a proven method of delivering new infrastructure. It deserves to be judged against its imperfect alternatives. Although a P3 may not make sense for every project, they should continue to play an important role in meeting future infrastructure needs in the U.S.

President Trump Issues Third Instalment of Buy American Initiative

On 15 July 2019, President Trump issued his third Executive Order aimed to further his “Buy American, Hire American” initiative. Executive Order No. 13881 (the **Order**) entitled ‘Maximizing Use of American-Made Goods, Products, and Materials’ attempts to strengthen the standards that federal agencies must follow under the Buy American Act (**BAA**) by raising the threshold for domestic purchasing requirements. Specifically, it proposes rule changes that would require iron and steel end products used in federal procurements to contain 95% U.S. materials. This is significantly above the current 50% threshold. The Order further proposes a rule requiring non-iron and steel end products used in federal procurements to contain 55% U.S. materials, up from the current 50% threshold.

Additionally, the Order directs the Federal Acquisition Regulation Council to consider increasing the price evaluation preference that domestic end products enjoy under the BAA.

The practical impact of this Order, as well as two previous Executive Orders, remains to be seen. If implemented, domestic industries supplying domestic end products are certain to benefit in the form of a competitive advantage. However, this home field advantage could likely come at a cost to the American taxpayers, as the pool of qualified suppliers would be reduced, resulting in less competition. With decreased competition comes a possible increase in prices that the government will pay to procure these products.

DoD, GSA and NASA Issue Proposed Rule Addressing Credit for Lower-Tier Small Business Sub-contracting

On 28 June 2019, the U.S. Department of Defense, the U.S. General Services Administration, and the National Aeronautics and Space Administration issued a Proposed Rule that addresses increased opportunities for contractors to receive credit for lower-tier small business sub-contracting.

Under the Proposed Rule, contractors will be able to take credit for their lower-tier sub-contractors' small business utilisation. That benefit, however, comes with strings attached.

For instance, contractors will need to assure the government that they are monitoring lower-tier sub-contractors' compliance with their sub-contracting plans. This will require contractors to work more closely with their lower-tier sub-contractors and amend their sub-contract agreements to allow them more visibility into sub-contractors throughout their supply chain.

Practically, prime contractors with existing robust compliance systems to track sub-contractor compliance with small business contracting plans will benefit from the additional potential credit. Other contractors will need to update their sub-contract agreements and modify compliance systems to become compliant with this updated Federal Acquisition Regulation provision.

Feds To Launch New Source for Information about Major Transportation Projects

Since 2017, the U.S. Department of Transportation has been mulling over the idea of creating an online information source for transportation projects. The goal would be to create a comprehensive, easily accessible project cost database for major U.S. transportation projects.

The information could be valuable in many ways, including assessing the project performance outcomes for both P3s and more conventionally delivered projects.

At the 2019 Transportation Research Board, it was announced that this will soon be a reality, courtesy of the Federal Highway Administration's (**FHWA**) Office of Innovative Program Delivery housed in the U.S. Department of Transportation's Build America Bureau. With assistance from researchers at the University of Maryland, the FHWA is conducting a rigorous data collection effort for over 130 U.S. transportation projects covering development, procurement, design, construction and operation and maintenance costs.

There are many benefits of this online source, including the creation of a tool that will assist in establishing benchmarks on projects delivered conventionally and through P3s. This type of benchmark is also expected to be versatile because projects will be categorised by type, region, and delivery and financing approach (DB, DBF, DBFOM, CM/GC). And it is expected that the tool will capture, not just the capital cost of the project, but its operational and maintenance cost and delivery and financing approach. Contractors could use this type of historical data in putting out bids that are not just based on current/future estimates, but also on past performance statistics.

USA

CANDA

New risks for engineers – Climate change and the National Building Code

Canada is already a country of extremes, having to cope with summer heatwaves and harsh winters. As extreme weather events occur more frequently, fluctuating temperatures threaten the resiliency of our infrastructure. Canada's National Research Council is working on updating the National Building Code to take into account the growing risks posed by climate change and extreme weather events.

The National Building Code sets out technical provisions for the design and construction of new buildings. The changes to the Code will be varied, including new guidelines for certifying the resiliency of roofs, specifications to optimise concrete mixes for pavement, and new standards for basement flood protection. The goal is to make infrastructure and buildings across Canada energy-efficient and safer, and to prepare for future floods.

The changes to the National Building Code should be released in 2020, though new regulations could take effect only in 2025. It is a model code that forms the basis for all of the provincial building codes that are then adopted, with or without changes to reflect regional influences.

The construction industry will need to stay abreast of evolving building standards and building techniques to protect themselves against climate change liability, and to incorporate sustainability into the building process. This is particularly true of engineers, architects and other construction professionals who are subject to legal responsibilities and standards of care.

Now more than ever, these construction professionals will need to conduct proper due diligence to mitigate for risk and uncertainty by basing their designs and decisions on adequate information and by correctly identifying risks to clients.

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Adjudication in Canada - The Construction Act in Ontario

Ontario's new Construction Act includes changes to construction law that will impact how property owners, general contractors, traders, and others do business in Ontario. Two significant changes are the introduction of both prompt payment rules and adjudication rules, that came into force on 1 October 2019. These rules are modelled on the UK regime, which has been in place for approximately 20 years, and are designed to reflect a sea change in how construction projects are to be implemented in Ontario.

The intent of the rules is to protect cash flows and ensure disputes are resolved quickly, in order to facilitate a project's successful completion. However, there is considerable uncertainty as to how this intention will be realised in practice, and the extent to which industry players will buy in to the ideal of the new regime. The entire adjudication process is intended to be completed within just 46 days. This is not long for an owner or contractor, given that it will be required, for example, to devise a strategy, ensure its documents are in order, and present a compelling case, within such period.

Canada Infrastructure Bank remains open for business

The Canada Infrastructure Bank (**CIB**) became an election issue during the 2019 campaign, as two of the main political parties promised to abolish it if they were elected. Following the re-election of Justin Trudeau's Liberals with a minority government, the CIB is expected to continue to invest in several large-scale projects in a range of areas from public transit, trade and transport to green infrastructure and broadband.

The Government of Canada created the CIB, a federal Crown Corporation, in 2017 to strategically fund revenue-generating infrastructure projects that are in the public interest. It is being funded with CAD 35 billion over ten years to attract further capital from private sector and institutional investors. Projects funded by the CIB must involve private sector investment. Significant investments of federal money have already been made, including CAD 1.28 billion that has been injected in Montreal's new rapid transit system project. Toronto's GO Transit System will also benefit from a CAD 2 billion investment as it prepares to expand.

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Project-related technology is changing the industry

Technology is changing many industries, and the construction industry is no exception. Here are some examples of how digital technology is transforming the construction industry in Canada:

- Off-site monitoring - mobile devices and their apps enable contractors and project managers to remotely monitor how work is progressing onsite. Special apps allow employees to send updates through their smartphones, as well as pictures and videos. The information is shared through cloud-based software, allowing real-time remote access to the data
- Work safety improvement - new developments such as clash detection software help prevent on-site accidents. Augmented and virtual reality is also a precious training tool that is starting to be recognised as such, as employees can better anticipate on-site hazards by training beforehand in conditions closely resembling those found on construction sites
- Tracking of goods and people - high technology GPS tracking allows companies to follow the delivery of products and equipment, as well as monitor who comes in and out of construction sites and at what time. This reduces the chances of loss of material, especially important in the construction industry where equipment can easily be worth thousands of dollars and more
- Transparency - digital technology allows for greater visibility of who is doing what and when, through construction management software purposely designed to streamline and document the various stages of construction work
- Building Information Modelling - digital representation of buildings trumps blueprints when it comes to planning construction work. The technology also uses historical data to predict and improve future projects

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The impact of cannabis legalisation

The legalisation of cannabis came into effect with fanfare on 17 October 2018. A year later, it is too soon to say whether predictions of a rise in consumption are correct. Still, there are concerns about the effect cannabis consumption has on work performance, attendance and safety. Safety is of particular concern on construction sites, where workers often operate heavy machinery and power tools – and often on short notice.
It might be tempting for employers to adopt a zero-tolerance cannabis policy at work. However, employers also have a duty to accommodate employees who have been prescribed medical marijuana. A zero-tolerance policy could even be construed as discriminatory against employees who have a disability and are using cannabis to help relieve their symptoms.

Even so, employers should look into implementing a clear policy delimiting medical and recreational use of marijuana. Such a policy should also be clear on what constitutes impairment, so that employees can understand if, when and how marijuana use is acceptable.

Employers can also consider submitting employees to drug tests. The challenge, however, is that these tests don't capture the level of impairment adequately. For small and medium-sized companies, the cost can also be prohibitive.

Hopefully, the government will provide guidance on how to deal with cannabis in the workplace. In the meantime, Canadian employees are being asked to abstain from consuming on the job.

State of the construction labour force in Canada

Canada's construction industry is facing a labour squeeze. According to recent forecasts by BuildForce Canada, labour demand is expected to peak in 2020, much of it driven by major infrastructure projects.

In the long-term, the construction industry faces the challenge of losing about 22% of the current labour force through retirement. The industry will have to turn to new recruits to make up for the loss. The report also highlights the importance of maintaining high-quality training and apprenticeship programs targeting the next generation.

Groups that have been historically underrepresented in the industry, namely women, Indigenous Canadians and immigrants, could play an important role in renewing the skilled workforce

BuildForce reports that, in 2018, women represented 13% of the construction workforce, and only 3.8% were employed in on-site construction work.

This is despite the fact that women represent 48% of Canada's total labour force.

The bottom line, according to the report, is that the construction industry needs to step up its efforts at recruitment in these areas.

BACK TO MAP

2020 PREDICTIONS

2020 PREDICTIONS

We have analysed the developments in the global construction industry in 2019 to produce eight predictions of trends, topics and themes that will dominate the industry's conversation in 2020.

From the industry's response to the risks and opportunities presented by climate change, to legal developments in South Africa, Saudi Arabia and the UK, we do not expect the pace of change to slow down as we enter a new decade.

The construction industry will take action on climate change as greater attention will be given to ways of using engineering, technology and design to seek to minimise emissions and maximise sustainability.

Please click **here** to read more.

Low LNG prices mean the market is likely to remain a buyer's market, with the trend of the announcement and development of new LNG import projects likely to continue.

Please click **here** to read more.

The continued development of the middle class in South East Asia will encourage infrastructure investment in the region.

Please click **here** to read more.

Procurement will be top of the agenda in the UK as infrastructure investment becomes a political priority.

Please click **here** to read more.

2020 will see more torts in the UK courts for construction cases as construction claimants continue to be more creative in the Courts.

Please click **here** to read more.

South Africa's Integrated Resource Plan will prompt energy sector reform in the country.

Please click **here** to read more.

Pressure on the UK government to find a successor to PFI and PF2 will grow.

Please click **here** to read more.

The Saudi Government's new Government Tenders & Procurement Law will create a favourable market for construction projects in 2020.

Please click **here** to read more.

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