

## Kiwi Infrastructure Limited v 2.4

### Preliminary Issues Paper Submission on the Commerce Commission 2022 Market Study into Building Supplies

Kiwi Infrastructure applaud the Commerce Commission for a sensible start to a critical market study which should be a step forward to reduce housing costs, improve quality and sustainability, for all Kiwis.

Kiwi Infrastructure thanks the commission for its engagement and perseverance in understanding deeply complex market structure issues which are sometimes gamed. We compliment the Commissions discussion of game theory in the body of the issues paper.

The Challenge ahead is to convert complexity and cost by 1000 components to several themes of executable transformation, where policy changes and market structure changes ignite, competition on costs, and improvements in innovation and quality for consumers.

Kiwi infrastructure is a Greenfields institutional start-up which has studied social house assembly globally.

Kiwi Infrastructure has visited 32 house building factories to study international best practise in assembly of high-quality entry-level housing solutions using robotic assembly in standardised modules, and new supply chain dynamics in NZ at Scale to build for private and public social housing enterprises.

Central to this industry transformation, to adjust NZ construction costs to international best cost basis was a scalable order from central government and a new legislative framework around scalable greenfield developments focused on effective cost basis, leveraging new OSM and Panelisation technologies.

Pre Covid the Kiwi infrastructure transformation team advocated for an independent international consultant to produce a international benchmarking report to compare the cost of construction of social houses in NZ versus international best practise.

This report had to be commission and paid for by a NZ regulator as it needed to be independent of the existing industry who were perpetuating their status quo and blaming govt and regulators for excessive costs and inefficiency. (we nick-named this report the "*Mckinsey Report*" ), even though it may be completed by another international consultancy group.

Kiwi infrastructure board was horrified and stunned at the " Deloitte Report" , paid for by Fletchers and thought that the Deloitte NZ Board disgraced & embarrassed themselves with the publication of such a childlike vested interest document . We urge the Deloitte NZ office revisit its ethics protocols, and to refrain from recruiting analysts who are not up to the usual wonderful internationally acclaimed quality most business people experience when they commission Deloitte for assignments .

---

**Kiwi Infrastructure will forward to the Commission the Kiwi Infrastructure proposal to the Kanga Ora ITP process and ask to keep it CIC until further notice.**

For Brevity Sake the plan was

- 1) Greenfield institutional start up with substantial Capital of \$500m+
- 2) Done it before International technology partner
- 3) New supply chain on international best price basis
- 4) Some OSM and Panelisation to leverage Scale and design consistency
- 5) Large orders from private developers, underpinned by transformational govt order
- 6) Acknowledgement that OSM and Panelisation are not a silver bullet and incur initial risks
- 7) Leverage of scale to get pricing and productivity to international best practice

Kiwi Infrastructure will answer some of the questions which are relevant to its substantial seed capital investment in studying international OSM and house assembly.

***CIC Where KIL have answered CIC or Defer to meeting, its on items that we feel are commercially sensitive or unfair to the Kainga Ora Executive team. These people respected and understood transformation but had pressures of build like hell immediately, along with complex tenancy and governmental issues , as a consequence a transformational order was not available . CIC***

We would like to share many photos and pictures with the Commission which will share some important concepts. Whilst we are happy to make these pictures public, we want to check with the overseas companies whose facilities and products we photographed .

**Summary of core themes in our answers**

- 1) Please read the KIL proposal to capture a possible solution to the NZ problem.
- 2) The Impact a lack of competition has on productivity over the long run, is a bigger problem than the high margins.
- 3) Consumers, Businesses and Government, don't actually care about building material prices , what they care about is cost of construction .
- 4) International best practice benchmarking is critical in this study .
- 5) Kiwi Infrastructure is tabling a solution, because KIL& Monopoly Watch don't want to complain without offering some steps to fix the industry, which we are willing to finance and proceed with.
- 6) Its Not Radical, or Extreme, or untested to structurally separate and force ownership changes of parts of the supply chain, ( i.e. Fletchers & Carters ) - What is Radical is the current NZ ecosystem
- 7) Nonsense Board (GIB) , is an embarrassment to kiwis the 2 to 1 merger in 1987 should never have been allowed . The Study should recommend a fix to this problem in its final report.
- 8) Kiwi Tradespeople, Architects, designers are the best in the world, they are skilled, multi-disciplinary , creative and go getters . Their instinct to do it better is crushed by monopolistic suppliers and regulatory frameworks which aren't benchmarked against international best practise or focused on cost of production.

---

***We request the Commission that the ITP proposal for scalable OSM transformation be kept confidential until Kainga Ora and other investors are happy to release it .***

**What impact is the current level of competition in the building supplies industry having on New Zealand businesses and the public?**

Whilst building materials are only approx. 20-25% of the cost of a house, poor competition means lower productivity, because in more competitive markets there is competition (not just on price and quality) but on time to install and fix (builders, architects, designers, specifiers). In more competitive markets, more notice is taken on installation costs. The 80% of the cost of the house, which is labour, is severely impacted by this lack of competition in materials.

There is a lack of innovation in NZ in the important "Economy Market Segment" defined as social houses or entry level housing, on an international benchmark basis with other countries of similar size and urbanisation, there are no scalable builders, this means no organisational structures to create efficiency and price competition.

*We urge the commission to understand why there is a margin-on-margin problem in NZ building of social houses, internationally this rarely exists.*

*We urge the commission to focus on entry level social housing segments, of building materials and commodity products and not to worry about Prada Kitchen, Gucci Bathroom & Ferrari garaging premium segment. Ironically the Prada Gucci set will also see lower costs and improved productivity if the entry level segments are fixed.*

**Q2 How important is it for us to consider building supplies for renovations separately from building supplies used for new builds?**

New builds are where all the progress can be made in lowering prices for Kiwi Consumers, for ease of explanation if there are 3 market segments in NZ Construction markets which we use to explain our research,

- 1) Economy,
- 2) Premium
- 3) Luxury.

If Economy segment is fixed in new build, costs will drop in all market segments including renovations.

**Q3 Are there any aspects of the building supplies industry which have a particular impact on Māori?** Māori housing needs direct consultation, around retro fit and rebuild of houses to meet healthy homes standards. Māori are under-represented in skilled building jobs this needs to change. The Māori LBP community is Māori's best asset to understand healthy homes (source -Ngahere Raharaha MWNZ consultant)

**Q4 How does our high-level summary of the supply chain fit with your understanding?**

Its satisfactory, but it needs to be compared with scalable developers who build quality houses at \$1200 Per sqm (v NZ @ \$3800), in international locations such as Toronto, Houston, and Gothenburg. Where big players do not have the middle people intermediaries. We urge the Commission to look at markets

where scale prevents “margin on Margin “and luxury house building techniques are used to build social houses with Taxpayer’s money

- a. **Are there any other key steps in the supply chain we should consider? If so, please explain how these steps fit into the supply chain.** In other EU jurisdictions competition regulators have forced structural splits where distributors also manufacture, this is to create competition in supply and competition in installation systems
- b. **Are there building supplies relevant to this study that have different supply chain structures? If so, please describe these building supplies and how the supply chain differs?**

Yes We will submit an answer under separate cover

**Q5 How does our characterisation of the key participants and the other key stakeholders in the residential building materials supply chain fit with your understanding?**

This is a satisfactory explanation, but we urge the commission to complete some international benchmarking and make judgement calls on what the cost differences and structure differences in better performing markets, where high quality social houses are built at circa \$1200 per sqm

The problems, Consumers, Business and Governments care about, are the cost of quality construction rather than building materials per se

- a. **Are there any other key participants or stakeholders that play a major role in the industry? If so, please explain the role of these participants or stakeholders.**

Insurance companies who insure against product or construction failure,

**Q6 Is the structure of the supply chain changing or evolving? If so, please explain how and over what time horizon this is likely to occur?**

There is not a silver bullet to the death by 1000 cuts of construction affordability, but – in many countries

- 1) Scale
- 2) Offsite Manufacture and Panelisation, processes take place.

This hasn’t happened in NZ because there have been no large scale well capitalised disrupters, and large scale players like USG /Knauf et al have left . This is in the backdrop of ridiculous profitability and cost basis on an international basis.

***This perfect storm of excess cost & inefficiency and consumer hell will not be fixed without a restructure of the market structure. The Challenge for this market study is to identify the low-risk steps to fix the problem***

**Q7 Do you agree or disagree with our preliminary view on the "key building supplies" in scope for this study, as described in paragraphs 49-52 and Table1? Please explain your reasoning.**

We disagree, because despite research, we can't find any new NZ homes without plumbing and electrical services (other than tents) . There are substantial price and productivity differences in these services and installation practices, which are out of synch, with international best practice they must be included in the study.

We urge the commission to build a model which compares a basic quality healthy home social house in NZ with its best practise international peer group , seismic and humidity adjusted . Then compare table 1 (including Electrical and plumbing) pricing and installation times

**Q8 If we focus on a narrower selection of building supplies to assess certain issues, are the factors set out in paragraph 55.1-55.5 appropriate to guide our focus? Are there any other factors we should also consider? Yes**

- 1) What is international best practise
- 2) The IMPACT MARKET STRUCTURE HAS ON TIME TO FIX AND INSTALL PRODUCTS, ( this is where the real cost blow out occurs ) and helps economists and analysts how to account for the difference in costs of building social houses in NZ and EU best practise , this linkage ( high HHI costs creates low productivity ) must be studied by the commission in this enquiry.

**Q9 Which key building supplies do you think should be assessed in greater detail, or otherwise prioritised? Please explain your reasoning.**

The Monopoly Watch team thought it was academically lazy to canvases the market structure problems in Plasterboard ( GIB ) , because its too easy to understand what's wrong and the October 2014 ComCom Report , explains it .

What is useful is that many other less important products mirror this market structure and it's the list of the top 20 by strategic important (value and time to fix ) , which need attention

What's interesting about plasterboard is

- 1) Rebates
- 2) Fixing systems
- 3) Nonsense about lateral support and bracing! ( really ? )
- 4) Training and product information
- 5) **Nonsense with Aqualine** , which whilst still used in NZ to tile showers similar products are banned in many international countries because it doesn't have a long enough life . the Most interesting dynamic is Fletcher Residential who produce it , don't allow it in their own Fletcher Residential houses – Choosing to use Acrylic shower liners instead .

- Plasterboard
- Roofing
- Aluminium Windows
- Fixtures
- Sealants
- Premium paints
- Timber
- Plywood
- H3 and H5 poles  
Wiring & Switches in entry level segments
- Plumbing commodities

**Q10 How will key building supplies evolve in the future? Will different materials become more important?**

Greening of the building process and the eventual pathway to UK style EPC ratings mean an evolution needs to occur, this is an opportunity to change the culture and pricing and productivity

**Are the characteristics set out above an accurate reflection of residential building in New Zealand? Please explain your reasoning.**

The impact of leaky homes continues as 3<sup>rd</sup> party professional consultants, look to continue to preserve their reputations by using legacy products and systems, it turbo charged the ability for incumbent suppliers to preserve their positions.

**Q12 Are there any other characteristics of residential building in New Zealand which are important for us to understand –**

YES there is no scale where the capital base of the assembly company (builder) is larger than that of the material supplier, who has the capital and the business case of incentives to innovate and introduce difference systems and scalable change. The cottage industry structure of many building companies, (even the larger franchisers) means they are following the suppliers orders, taking their rebates where possible and playing the margin on margin on margin game, which the consumer pays for.

Ridiculous amount of bespoke and lack of standardisation in entry level homes, relative to international locations.

**Q13 Does our summary of the external pressures facing the residential construction industry accurately reflect the current situation? Please explain why/why not.**

What needs to be reviewed is the HHI ratio of the products which are in short supply in NZ. thereby seeing if there is gaming.

~~A review of the longer-term~~ strategic impact of the sale of NZ forestlands in the 1990s to the American Pension Fund industry who on sold to the Chinese needs to be considered also

compare this with the long list of OECD countries who won't let unprocessed timber logs be exported and how a basic commodity that NZ needs and leads the world is supply exhausted.

**Q14 To what extent are these external factors temporary or likely to continue in the long term?**

These external factors will continue, because *there is no challenger to pressure* them back to normal pricing .

**Q15 Would an increased use of technology, such as prefabricated housing, help to address some of the longer-term pressures facing the industry? Please explain why/why not.**

Prefabricated OSM (off Site Manufacture) is not a silver bullet , it's a long term evolution transforming from *nail gun build to robotic build in panelised and volumetric ( modular) build* , This requires , Scale , Scale and Scale , to develop . Scale lubricates capital, and scalable contracts deliver long terms ( 7 yrs ) , stable similar contracts where a Toyota style culture can be brought to manufacture .

**Q16 Please describe any other examples of innovative technologies or approaches that could increase efficiency in the sector over the longer term.**

KIL has a list of people for the commission to refer to on an independent basis, its inappropriate to publish this list ( CIC ) will revert

**Q17 Please describe any other major external factors that are currently impacting (or have recently impacted) the New Zealand residential building industry that we should consider in this study and the time horizon over which they will impact the industry.**

- 1) Labour availability
- 2) Skills
- 3) Sensible Greenfields land, which suits OSM
- 4) Legacy of leaky homes

---

**Q18 How might the regulatory changes described in paragraphs 74 and 75 affect the demand for or supply of certain types of residential building supplies?**

No regulatory changes look at cost! they are all vested interest to a specific clause , the new higher density housing plans , is a rational place to secure “ *standardised Scalable structures* , in say 3 configurations to compliment this initiative which will lower land prices to simultaneously lower construction costs . We will canvas this in private with the Commission as we have seen this happen in other countries.

**Q19 Please describe any other major recent or ongoing regulatory changes that may affect demand for certain types of residential building supplies.**

Recent increased density planning laws. , This is a major opportunity ,to simultaneously lower assembly costs for townhouses , - which will have many similar characteristics .

**Q20 Does the regulatory environment pose challenges to the introduction of prefabricated products? If so, please explain where you see the issues and whether these will be addressed by the latest regulatory reforms.**

In regulatory, all matters need reform, to lower cost to the international benchmark, so for well capitalised nationwide builders there is needs to be a component cost of regulatory , which is similar to the same % as in the best regulated environs of Canada, Texas and Sweden.

**Q21 What are the most important ‘green’ building supplies for us to focus on?**

We will answer this question independently  
 .in CIC

**Q22 Please describe any other ways in which building for climate change might drive change and innovation in the residential construction sector.**

Recycling timber and materials Lowering cost of solar power  
 Roof space of residential being more actively used to capture the sun’s energy

**Q23 Do you have any comments on our proposed high-level approach to the study as discussed in paragraphs 83 to 87 above?**

We believe the Commission would be well advised to select some well performing markets and make comparisons, Whilst travel is difficult, it is possible for Commission staff and 3<sup>rd</sup> party consultants firms like McKinsey , Accenture and PWC who have a wealth of information which must be used in this study .In a perfect world the Commission would travel to Houston, Toronto , Blue Print Robotics in Maryland , Brisbane , Knottsville ( Clayton Homes ) Pitea Sweden ( Lindbäcks ) and L& G UK Leicester . Also the Saint-Gobain conference in Birmingham also . This would not be the ComCom doing the MBIE job, it would be ComCom understanding market structure differences and international price points.



**Q24 Would international comparisons of key building supplies prices provide insights into the level of competition in the industry? Why/Why not?**

Hell yes , pricing can be adjusted for Seismic , Wind , Humidity and it would also compare "TIME TO FIX or INSTALL " , in these prices

**Q25 How should we assess the levels of innovation in the industry? Is there away to measure this or benchmark internationally? Yes**

- 1) EPC performance
- 2) Time to install
- 3) Use of robots % sqm built
- 4) Labour hours per Sqm

**Q26 Would assessing the margins of the manufacturers and/or merchant sales of key building supplies provide insights into the level of competition? Why/Why not?**

International margin comparison would be useful in Plasterboard, its nuts !! , but the place to do the financial modelling is in the cost of construction per square meter in a comparison of a like for like social house ( i.e. 3 bed 2 bath 200sqm ) townhouse paid for by taxpayers .

**Q27 Are their other assessments that would provide better insights**

- 1) Search out international best practise in economy segment social housing cost per sqm seismic and wind adjusted
- 2) EPC ratings cost
- 3) Productivity measures (labour hours per sqm meter) benchmarked

**Question 28 On what geographic basis (eg, local, regional, national) should we assess the concentration of key building supplies. Please explain your view.**

National, we will present more information in a meeting

**Q29 Are there any key building supplies which stand out as having a limited choice of suppliers? If so, please explain which building supplies.**

- 1) Plasterboard
- 2) Aluminium windows
- 3) Roofing iron
- 4) Timber trusses
- 5) Fixings
- 6) Concrete
- 7) Sealants
- 8) Compliance and consenting
- 9) Insurance protocols
- 10) Inspections

**Q30 What are the barriers to importers of key building supplies competing effectively with domestic manufacturers?**

- Regulatory,
- Rebates
- Distribution

**Q31 Are there building supplies you are aware of that are not available in New Zealand, but you think would benefit New Zealanders? Please describe these supplies and benefits.**

Yes we will submit downstream on this

**Q32 How do economies of scale in the supply chain for key building supplies impact the number of suppliers?**

Commodity building products are essentially capital intensive fixed costs business models, scale is everything, and barriers to entry are erected in NZ , Because there are so many products that go into a house ( death by 1000 cuts) , we urge the commission to choose the top 40 products ( by value x strategic importance ) and then closely look at the impact of competition on time to install and certification .

**Q33 What are the main barriers to new providers of key building supplies establishing domestic manufacturing in New Zealand?**

Distribution and architect / designer specification

**Q34 Are customers, (for example, merchants when purchasing from wholesalers, or builders when purchasing from merchants) able to constrain their suppliers due to their own size or negotiating position? Please explain why/why not?**

No , rebates, delivery times , other discounts , incentive trips , but essentially even a big NZ group house builder has no scale in terms of upstream negotiation capability . Its cottage industry against big operator.

**Qu 35 Does vertical integration act as a barrier to entry/expansion for independent rivals? Does this differ for different building supplies? Please explain your view.**

Yes

Only where there is no competition, vertical integration helps consumers, unless HHI ratios are too high, this creates bad outcomes and no choice, but no competition in installation times

This depends on the HHI ratio for the product.

Vertical integration means the distributor has no incentive to innovate with its selection of products it wholesales

**Q36 Is being vertically integrated necessary to compete effectively in this sector? Please explain your view.**

CIC will revert

**Q37 What are the benefits in this industry to being vertically integrated? Do consumers benefit from this?**

Yes if there were 5 equal players with low HHI's then there is benefit, the problem is capital intensive business, with vertical integration with high HHIs.

**Q38 Are there any other factors we should be aware of in considering the vertical integration of key building supplies?**

- Market power
- Accommodating behaviour
- Rebates
- End customer doesn't see "benefits" of training trips, rebates etc
- No incentive for new products, or green products, or quicker to fix products

**Q39 What forms do supplier rebates and loyalty payments typically take in this industry? (eg, monetary, non-monetary, lump sum etc.) Does this vary by type of building supply? If so, please explain how.**

Sports parties, training workshops and nightclub activity, ( makes 1980s NY stockbrokers look tame ).

**Q40 Do rebates / loyalty payments usually relate to one product or category of product, or are they often applied across multiple products or product categories?**

Will revert

**Q41 Do rebates / loyalty payments inform or restrict a merchant's or builder's decision about which product(s) to acquire? If so, how significant is this consideration?**

Will revert

**Q42 Is tying of products or products "systems" a prevalent practice? What level of the supply chain are characterised by tying arrangements?**

Will revert

**Q43 Are exclusivity agreements prevalent? What levels of the supply chain are characterised by exclusivity agreements?**

Will revert

**Q44 Do the benefits of rebates and pricing pass through to end-consumers? Why/Why not?**

The discounts and rebates are not disclosable, (working example Gerry Smith builders shows client invoice for job ( \$1000 for XXX products) ,the client may see this , but they don't see the rebates , entertainment , the training , they are not even invited to the nightclub !

**Q45 Are there any other factors we should be aware of in considering the arrangements of key building supplies?**

Yes productivity impact that tidy, prompt deliveries, have and the fact that the major cost to the builder is delivery time , site management and sequencing

**Q46 Is accommodating behaviour likely to be an issue in this industry? Please explain why/why not.**

2013 Cook Street PlaceMakers and Carters, a prosecution took place and the fine was less than the cost of drinks on Friday evening ( >\$5000)

**Q47 How transparent is pricing for key building supplies?**

It's not because of rebates, discounts and bundling

**Q48 Are there any other factors we should be aware of in considering accommodating behaviour in building supplies**

Credit terms given to Builders and their non disclosable rebate benefits, - This is a problem in all industries the major problem in building is the absolute cost of construction, All industries have bad behaviours, in construction it's the sharing of monopoly rents up and down the supply chain to preserve dominance.

Construction is hard, occasionally physically demanding, dusty and complex , the relationships at suppliers hugely impact productivity .

These bespoke incentives enable distributors to control tradies , an institutional scalable economy segment builder institutionalises these relationships and these incentives are removed as real choice in purchasing evolves .

**Q49 Do the regulatory and standards systems (eg, product accreditation framework, building code and standards or consent process) make it easy or difficult for new and innovative building supplies to enter the New Zealand market and establish a presence? Please explain any difficulties posed and your view on whether it would be beneficial to make it easier for new suppliers to enter the New Zealand market.**

We have an independent paper on this under separate cover

**Q50 What impact does the current regulatory environment have in encouraging or discouraging a move to 'green' building supplies?**

CIC will revert

**Q51 Does the current regulatory regime favour incumbent suppliers over new entrants? If so, please explain how.**

Incumbents, by history, control of regulatory process, job swapping, knowledge, distribution chain, industry knowledge, rebates etc, Consumer and regulatory preference

*"Mr XXX builder throws the 60 page GIB Fixing handbook at the customer (Tex Edwards) and says, FFF, FFF, FFFFFUUU, if you want elephant board you will never get council approval". He storms off the job and goes for a swim at Palm beach.*

*Mr Edwards buys GIB and the fixing system for XXX, he finishes the job, He fly's to London and buys exactly the same amount of plasterboard and uses similar fixing system he does this for 15% of the cost of NZ.*

*Mr Edwards buys a window in Waiheke for \$8000 + install he buys exact same size for GBP 800 quid -Installed*

**Q52 Does the current regulatory regime encourage vertical integration (including, for example, in-house product compliance) or vertical arrangements in the sector? If so, please explain how.**

**Q53 Does the current regulatory regime encourage the offer of 'systems' of products? If so, please explain how.**

*To get the supplier warranties or council sign off you need the official bolts, screws, sealants, glues, etc etc.*

**Q54 Are there any other factors we should be aware of in considering the regulatory and standards systems for building supplies?**

Targets for transformation need to be set to international best practise

**Q55 Who are the key decision-makers for key building supplies?**

Specifiers –or builders, or architects who have a vested interest in easier compliance

**Q56 How do decision-makers choose the most appropriate building supplies touse?**

We will discuss this section separately

- a. **Do decision-makers default to choosing building supplies which have been used in the past? If so, please explain why.**
- b. **Do decision-makers on key building supplies have full information available to them to make informed decisions? How costly is it to obtain this information?**
- c. **What role do warranties or other guarantees have in the decision to choose the key building supplies?**

**Q57 Do the incentives of the decision-makers on key building supplies align with the interests of consumers?****Q58 Are there any other factors we should be aware of in considering decision-makers' behaviour in respect of building supplies?**

- Delivery
- Packing
- Value add from Distributors (which is genuine and sensible)
- Site management
- Rugby Tickets, Car Races and Horse Races

**Are there any other issues not raised in this paper that could affect competition in the key building supplies?**

- 1) Impact of leaky home legacy
- 2) Average age of LBP people
- 3) NZ dollar range ( for imports)
- 4) Anti Dumping legislation
- 5) Grooming and training of Compliance people in councils

**Q60 Which potential issues do you think should be the priority issues to focus on?  
Please detail the reasons why.**

- 1) Impact on productivity of the market structure in materials
- 2) Why is margin on Margin on margin so prevalent in social house building – when it isn't internationally
- 3) Why is there no scalable entry level market segment builders?
- 4) What impact of structural separation of Fletcher GiB Board (unwinding the 1987 Merger) and Carters / Timber v distribution would do to new products
- 5) Why is there no competition in cost per square built? at scale

*We thank the Commerce Commission and its analyst team for considering the Kiwi Infrastructure Limited ( KIL ) Ver 2,4 position . We look forward to commenting further and explaining our points in more detail should this be requested.*

**Tex Edwards**

Worker

**Kiwi Infrastructure Limited ( KIL ) Ver 2.4**