



# Risk Governance Framework for Procurement in Future Fuels

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## Foreword



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In my career spanning four decades as an engineer in the Australian pipeline industry, I have often witnessed unexpected negative outcomes in relation to transactions for procurement of materials, services and specialty items. I welcomed the opportunity to assist as an industry advisor for the FFCRC research project “Risk Governance for Procurement in Future Fuels” in order to ensure as far as possible that such negative outcomes are avoided as we repurpose our pipeline industry to meet new challenges.

By studying examples of procurement failures worldwide, and then analysing interviews with more than fifty personnel in the Australian pipeline industry, this project has identified several important procurement principles which are directly relevant for us as we progress this transition to a future fuels economy.

This summary document presents these findings as guidance applicable to a wide range of procurement transactions, and I am pleased to have played a small part in working with this excellent team of researchers.

While your organisation may already be implementing some or all of these principles, both purchasers and suppliers are encouraged to carefully consider the recommendations set out in this booklet when planning future procurement transactions.

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The transition to future fuels will involve a massive expansion in industry procurement of both goods and services. To support that effort, this risk governance framework sets out twelve key principles for effective risk governance, associated practices and key considerations for both purchasers and suppliers.

It is the distillation of hundreds of years of experience with procurement – why things often go very well, but sometimes go way off track in unanticipated ways. To prepare this summary, we have interviewed more than fifty professionals in the energy sector about their procurement experience and drawn on lessons learned from past procurement failures across sectors ranging from energy to infrastructure and built environment. We thank everyone who was prepared to share their experience.

With such a strong foundation, we hope the twelve framework principles seem like common sense to procurement professionals. As one of our industry advisers commented, the best insights often seem obvious to readers in hindsight and yet can still shed light on possible improvements to current practice. The following “how to” section sets out how we anticipate the framework can be used in industry.

This booklet is the second deliverable from Future Fuels CRC project RP2.3-06 Risk Governance for Procurement in Future Fuels and is a companion to the first booklet *Learning Lessons from Procurement Failures: Improving Future Fuels Project Outcomes*.

## How to use the Framework

The Risk Governance Framework for Procurement in Future Fuels (Risk Governance Framework) sets out twelve principles and associated default practices that are expected to be routinely applied in a project environment and in operations. The principles and the default practices that underpin them are established with an “if not, why not?” orientation, i.e., they should be applied and where any default procurement practices are not to be applied, justifications should be provided as to why they are not being followed.

Each principle also specifies key considerations with a list of reflective questions that both owners or purchasers and suppliers/service providers should ask themselves to ensure the principle and practices are adequate for a given procurement activity. The question sets can be used in several ways:

- Informally by those involved in procurement to inform decision making
- As the basis of more formal reviews of procurement plans conducted by individuals or in a workshop setting.

Special considerations for procurement of goods and services in a future fuels context are also included in each principle to account for the new and novel aspects of future fuels project activities and their potentially high levels of uncertainty and complexity.

The Framework applies equally to both purchasers and suppliers/service providers. It aims to reduce the risks of unplanned outcomes caused by failures in procurement practices and to improve the performance of all participants involved in procurement in the emerging future fuels industry for delivery of safe and reliable new infrastructure and technologies.

The Framework focuses on identification of risks, rather than providing detailed prescriptive advice regarding how best to manage risks. There are two reasons for this. In general, failures happen because people can't imagine them. This framework promotes reflection on what risks may be present in any given procurement situation. Once they have been identified, risk mitigation/control is the next step, and generally speaking, mitigation is relatively straightforward once a failure mechanism is understood. In addition, the range of procurement activities in the gas industry is wide, so fit for purpose and specific risk mitigation must be highly context specific and is not amenable to general guidance such as contained here.

The structure of the Risk Governance Framework is based on the *Framework for Establishing Effective Project Procurement for the NSW Infrastructure Program*.



# Principles

Develop a clear scope and specifications and communicate them clearly **1**

Establish a strong client team to get the best procurement outcomes **2**

Develop a realistic plan to address delivery risks **3**

Ensure quality is a priority for everyone **4**

Maintain strong links between procurement and operations **5**

**6** Choose the right supplier/service provider and the right contracting strategy

**7** Ensure the procurement function supports technical objectives

**8** Actively communicate with service providers and suppliers

**9** Conduct sufficient independent inspection/assurance

**10** Ensure changes are adequately managed

**11** Consider logistics early and set up adequate logistics arrangements

**12** Close out procurement mindfully

# Develop a clear scope and specifications and communicate them clearly

Successful procurement starts with a clear understanding of the overall scope of what is to be procured and a robust specification of individual items to be purchased. Having the scope and specifications clear at an early stage sets up a project for success. On the other hand, the record of procurement failures shows that many problems can be tracked back to detailed work commencing before the scope was clear and/or orders being placed based on incomplete specifications.

Time spent in the early stages of procurement to get these aspects right is well invested and is likely to be recovered many times over as purchasing proceeds more smoothly without the need for rework.

In the context of future fuels, rapidly developing technology and few suppliers mean that uncertainty is high and changes (in standards, legislation, and technology) are likely as procurement proceeds.

## Default practices

1. Allocate sufficient time and resources to understand the detailed nature of the work and associated requirements and constraints (technical, logistical, financial and resourcing).
2. Involve the right experts in writing specifications.
3. Clearly and precisely communicate needs, requirements and the end goal to suppliers/service providers.

## Key considerations – Purchasers

- Are the project description, scope and requirements clearly articulated for the target audience?
- Are we aware of the uncertainties inherent in the procurement scope and key specifications? Do we have systems in place to adequately identify and address such uncertainties?
- Have we sought out and considered lessons learned from past procurement successes and failures?
- Are responsibilities (for completing work and for identifying and acting on problems) clearly set out and understood by all parties?
- Have all likely operating conditions been considered for this material/item in both specification and testing requirements?

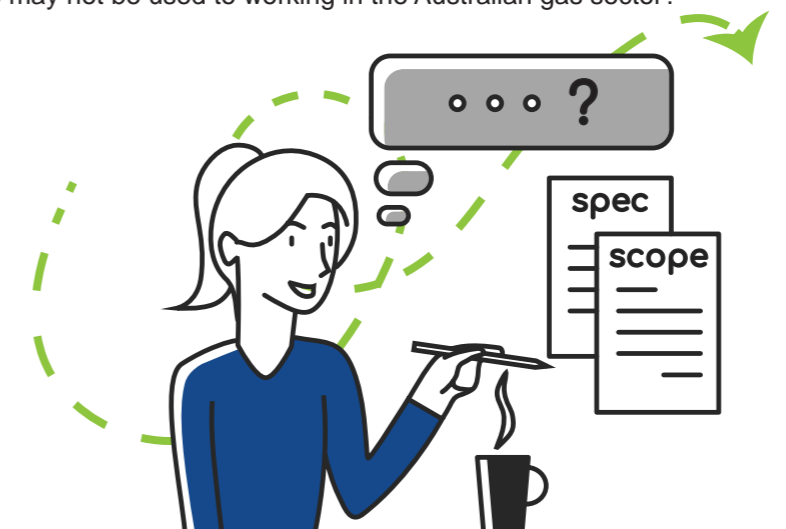
- How much “cut and paste” from past projects have we done in preparing specifications? Are we sure that what we have specified is right for this project?
- Have legislative and standard compliance issues been considered?
- Have we standardised the design as much as feasible and minimised our reliance on bespoke items?
- Have we confirmed that any overseas manufacturer/supplier is familiar with Australian standards that have been specified?

## Key considerations – Suppliers/Service providers

- Is there enough information to clearly understand what the client wants?
- Is it clear which parties are supposed to do what in meeting these requirements?
- Have we run into difficulty in the past trying to meet similar requirements? How can we prevent past problems recurring?
- Can we undertake or arrange for all necessary testing to demonstrate both quality and compliance with the specifications?
- Is the client open to consideration of a change in the specification to accommodate a standard design product that we can offer more cost-effectively?
- Does the client understand what we can offer? How can we better communicate this?
- Have we clearly communicated client’s requirements about the scope and specifications to sub-suppliers/subcontractors?
- Do we have a realistic understanding of the capacity of sub-suppliers/subcontractors to meet the client’s requirements?
- Have we confirmed that all our sub-suppliers are familiar with the Australian standards that have been specified and can deliver compliant products?

## Special considerations for future fuels

- Have we thought about how our past procurement practices, knowledge and experience apply to the needs of future fuels procurement?
- Have we considered current relevant research in developing our scope and specifications? Is there a process in place to keep up to date with new research as the project progresses?
- Have we adequately considered requirements around safety and controls, particularly for bespoke items, in the absence of relevant standards?
- How do we minimise risks related to meeting technical requirements under existing legislation and standards that are still being developed or updated?
- Have the scope of work and requirements been clearly defined and well understood by overseas manufacturers who may not be used to working in the Australian gas sector?



## Establish a strong client team to get the best procurement outcomes

The client (purchaser) team ultimately makes the most important decisions about how procurement will proceed. Such decisions need to be grounded in the best technical and commercial expertise, and made in a timely manner, for procurement to be successful. A weak client team can lead to confusion and mismatched interfaces between suppliers/service providers.

Timely and informed decision making from the client team is particularly critical in the context of future fuels, given the dynamic environment.

### Default practices

Ensure that the client team has the necessary resources and expertise for procurement oversight and interface management.

### Key considerations – Purchasers

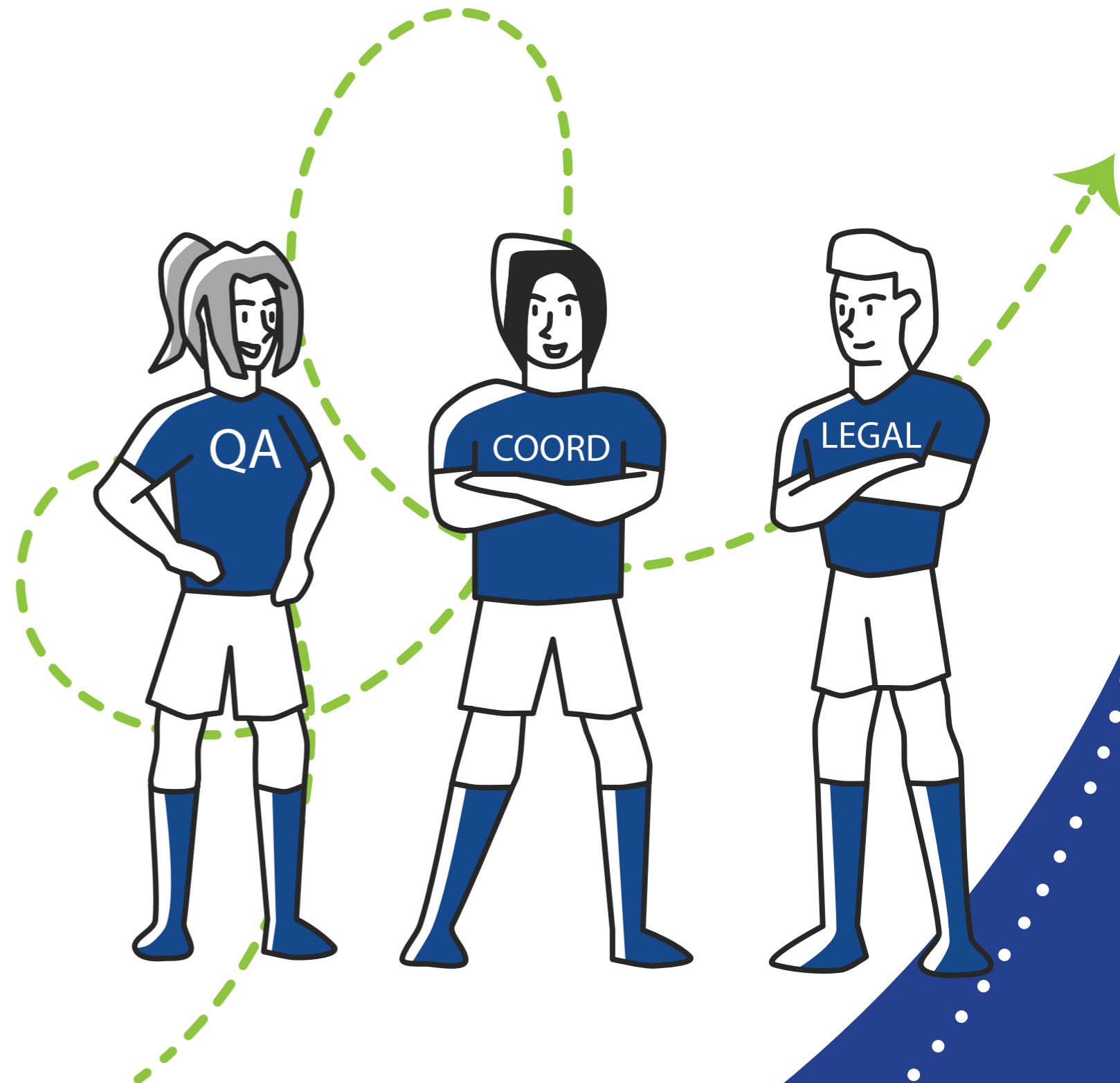
- Do we have the right knowledge to effectively manage all aspects of procurement, including possible supply chain disruptions?
- Do we have sufficient resources to make decisions in a timely and decisive manner?
- Should we appoint an interface coordinator to focus specifically on interface coordination and management, e.g., checking activities undertaken at the interfaces and verifying information shared between interfaces?
- Should we develop a program of independent review? At what points would independent reviews provide useful feedback?

### Key considerations – Suppliers/Service providers

- Are there risks for us in working for this particular client team, e.g., do they have experience in this type of procurement? How do we best manage any risks?

### Special considerations for future fuels

- Are we aware of the new technologies and operational nuances of future fuels? How will we keep up to date on these topics as the project progresses?
- Are we alert to unknown unknowns when making decisions in the future fuels context?
- Have we developed a collaborative mentality within our team for devising ideas and resolving problems when dealing with new technologies in the future fuels context?
- Are we well networked with other similar projects (both locally and internationally), or should we put more effort into networking and benchmarking?
- Are there strategies in place to upskill our team for adopting the new technologies?



## Develop a realistic plan to address delivery risks

Getting things done on time and within budget requires realistic goals and an effective plan to meet them. Time spent on planning to clearly understand interconnections and critical paths is time well spent. This is particularly the case for complex procurement settings. The organisational fragmentation inherent in procurement of large projects creates many interfaces which are known as structural weaknesses in any organisations. Adequate planning is essential to ensure successful integrated system performance.

In the current supplier-driven market, realistic planning is especially difficult for future fuels procurement.

### Default practices

1. Develop a realistic schedule and cost estimate to drive and benchmark progress.
2. Conduct risk assessment with consideration of delivery risks including legal and environmental requirements.
3. Consider ordering long lead items early to minimise delivery risks.



### Key considerations – Purchasers

- Do we have sufficient/suitable scheduling resources to develop a realistic timeline and keep track of progress?
- Has the project plan been benchmarked against similar projects?
- Have we allowed sufficient time and costs for land access negotiations and environmental approvals?
- Have we considered uncertainty regarding possible changes in legislation, foreign exchange rate, etc., which might impact delivery?
- Have we allowed contingencies and redundancies to address potential unknown unknowns?
- Have we identified likely long lead items and considered the best way to ensure timely delivery? Do we understand the risks introduced by locking in specifications for long lead items?
- Is there a mechanism for regularly reviewing the plan and making adjustments as necessary?
- Do we have reliable evidence that claims made by suppliers regarding delivery time throughout the procurement process are realistic?
- Are timelines and cost estimates realistic, or are we suffering from optimism bias?

### Key considerations – Suppliers/Service providers

- Are the required delivery schedules and costs realistic?
- Can we meet the contracted deadlines and cost requirements while ensuring the required quality of the goods/services provided?
- Have suggestions been provided to the client to avoid compressed timeframes and minimise delivery risks?
- Do sub-suppliers/subcontractors have the ability to meet the timeline requirements? Do we have reliable evidence that claims made by sub-suppliers regarding delivery time are realistic?

### Special considerations for future fuels

- Have we considered the likely different supplier behaviours brought about by the competitive market for future fuels equipment and the potential impact on schedule and cost?
- Have we considered additional time and resources required for addressing quality requirements for hydrogen equipment, particularly long lead items?
- Are there changes in priorities and logistics of delivery in the future fuels context?
- Are plans flexible enough to allow for changes resulting from unknown unknowns inherent in the transition to future fuels?

## Ensure quality is a priority for everyone

In the pipeline sector, quality must be the first priority as the consequences of putting poor quality systems into service are so serious. High quality goods/services are not necessarily the most expensive, but rather they conform to the requirements of technical specifications and the scope of work. Everyone has a role in ensuring a quality outcome from procurement.

Procurement for future fuels involves dealing with new suppliers who may have limited understanding of normal quality requirements in the gas industry, so fundamental expectations must be clearly articulated.

### Default practices

1. Ensure that quality is given as much attention in all communications as cost and schedule and is understood to be the responsibility of all parties.
2. Ensure quality requirements are consistently communicated across supply chain interfaces.

### Key considerations – Purchasers

- Is quality seen as only the responsibility of the quality department, or does everyone understand they have a role to play in obtaining a quality outcome?
- Is quality included in responsibilities for all position descriptions?
- Is quality a standing agenda item in all project meetings?
- Have all concerns about quality been addressed?
- Are quality results widely communicated and successes celebrated?

### Key considerations – Suppliers/Service providers

- Are the goods/services provided of appropriate quality in addition to meeting cost and schedule requirements?
- Have all sub-suppliers/subcontractors been well informed of quality requirements and expectations?
- Have quality-related issues, if any, been communicated to the client early?

### Special considerations for future fuels

- Do all suppliers (of both goods and services) understand normal practice regarding quality in the gas industry and how it transforms for future fuels?
- Is there a need for new quality control practices and metrics in the transition to future fuels?





## Maintain strong links between procurement and operations

A significant part of ensuring a high quality and timely outcome at a reasonable cost is to link procurement tightly to operational requirements. This consideration applies at all project stages.

Given the general lack of operating experience, this requires a particular focus on future fuels to determine how operational issues can be anticipated and considered in procurement.

### Default practices

1. Include operational expertise in the procurement process from concept development onwards.
2. Conduct cross-functional reviews such as constructability workshops involving design, procurement, construction and operation.
3. Consider having a separate operational readiness team.

### Key considerations – Purchasers

- Are there significant uncertainties in any of the operational interfaces? If so, are the risks managed sufficiently?
- Is operations input to decision making structured to give the right balance between short-term cost imperatives and gold plating for long-term benefits?
- Have all relevant parties been involved in cross-functional reviews? How have we considered their input and closed out issues raised?
- Have we considered the impact on operational resourcing (both people and things)?

### Key considerations – Suppliers/Service providers

- Do we understand the long-term operational requirements/implications of what we are providing?
- Have we provided input to improve the constructability of design and mitigate issues that are likely to cause problems in the later project stages?

### Special considerations for future fuels

- How can we draw on both internal (if relevant) and external operating experience with similar systems?
- Are we recruiting new operating personnel early enough for them to learn about the new technologies throughout procurement?
- Have we considered new operational requirements in the design process for future fuels projects?
- Have we considered the full range of future operating modes in all procurement activities?





# Choose the right supplier/service provider and the right contracting strategy

Choosing the right supplier or service provider is a key step in ensuring successful procurement outcomes. The cheapest supplier is only the right supplier when they can also meet the necessary technical requirements. The relationship between purchasers and suppliers is also critical and is driven significantly by the contracting strategy that the purchaser chooses to use.

In the context of future fuels, supplier options may be limited in the current seller-driven market. The paucity of suppliers impacts both availability and contract terms.

## Default practices

1. Develop comprehensive supplier/service provider selection and evaluation criteria.
2. Separate technical and commercial tender evaluation to avoid selecting a cheap bid that is not technically acceptable.
3. Choose the contracting strategy that matches the complexity of the procurement, the uncertainty in the supply chain and the experience of all parties.
4. Allocate each risk to the party best able to manage it.
5. Set up contractual terms and conditions with clear provisions on the responsibilities of each party, managing emerging/unforeseen risks and dispute resolution and avoidance.

## Key considerations – Purchasers

- If bidders were colluding or any other corrupt practices were involved in our supply chain, how would we know? What would we do?
- Does the preferred supplier/service provider have sufficient capacity to deliver as contracted?
- Do we have evidence that the preferred supplier's schedule commitments are realistic?
- Have sub-suppliers/subcontractors been appropriately prequalified?
- Are appropriate quality control plans in place for all sub-suppliers/subcontractors?
- Have we frequently revisited and updated the preferred supplier/service provider lists? Have alternative

suppliers/service providers been identified?

- Does the chosen contracting strategy reflect the level of uncertainty in project scope and execution strategies? Have we considered the opportunity to adopt more collaborative contracting strategies (e.g., ECI and relationship contracting) for complex projects?
- If using an EPC contracting strategy, do we have sufficient visibility and transparency in what the EPC contractor is undertaking?
- Have we worked collaboratively with suppliers/service providers to identify and allocate risks? Is responsibility for each risk held at the level/location where it can best be managed?
- Do contractual terms and conditions establish common goals, or are we incentivising suppliers/service providers to act against our interests?
- Are milestone payments appropriately structured to meet suppliers/service providers' financial capacity?
- Are there any provisions for managing emerging or unforeseen risks?
- Are performance warranties structured so that entities are held responsible for things within their control?
- What interfaces are created as a result of the chosen contracting strategy?

## Key considerations – Suppliers/Service providers

- Can we meet all criteria for the goods/services provided, e.g., price, availability, quality, experience, competence, health and safety records, integrity etc.?
- Have we done enough due diligence upfront to ensure the function required by the client will be met?
- Can we demonstrate that our tender addresses technical quality and feasibility, not just commercial attractiveness?
- Have we actively been engaged in the contracting process to make sure contractual terms and conditions are clearly defined and mutually beneficial?
- Are the risk assessment and allocation clear and transparent between all parties? Is there any uncertainty about who should manage a particular risk? How is this best resolved?
- Do we have the capacity to manage the risk allocated to us?
- Do we have backup plans in case problems arise?
- Have we selected sub-suppliers/subcontractors considering factors of competency and quality apart from costs?
- Are terms and conditions clear in all subcontracts?
- Are responsibilities clearly defined in all subcontracts?
- Can the sub-suppliers/subcontractors manage the risk transferred to them, if any?

## Special considerations for future fuels

- Are we prepared to demonstrate overall project viability to suppliers as may be required to gain their attention?
- Have we considered engaging our senior management into early negotiation and discussion with preferred vendors to secure their commitment?
- What sort of ongoing service support can suppliers provide in the longer term given a lack of in-house experience? Which suppliers have Australian-based technical support for special equipment needed for future fuels?
- Does the chosen contracting strategy allow us to develop relationships with new service providers? Will it focus on mitigating rather than transferring risks?
- Are the contracts adaptable and flexible for unknown unknowns associated with the transition to future fuels?
- Have we considered whether there are common knowledge gaps between us and our suppliers/service providers? If so, how do we address these knowledge gaps?

## Ensure the procurement function supports technical objectives

The primary objective of any procurement activity must be to get the right technical solution in place in a timely and cost-effective manner. Time and cost must be secondary to technical requirements, and so the procurement function in organisations must be secondary to technical aspects of procurement. Problems arise when procurement personnel are incentivised to act in ways that are not ultimately in the project's best interests.

In a future fuels environment, the level of technical uncertainty makes it particularly important that procurement is a support activity, not the driver.

### Default practices

1. Technical personnel should be involved in procurement decision making to balance technical requirements, cost and contractual risks.
2. Technical personnel should be appropriately consulted when changes are made to specifications for procured items.
3. Technical personnel and procurement personnel should develop a shared understanding and communicate consistent messages to suppliers/service providers.

### Key considerations – Purchasers

- Does our organisation structure reflect procurement's role as a project support function and promote cooperation between technical and procurement personnel?
- Do procurement personnel have sufficient knowledge about the items they are procuring?
- Are procurement personnel incentivised to most effectively support the project objectives?
- Who is responsible for vendor management? Do they have sufficient resources and knowledge to do this effectively?
- Does our chosen procurement strategy introduce additional technical interfaces that require special management?

### Key considerations – Suppliers/Service providers

- Are we able to communicate technical issues with the client team, including both technical and procurement personnel?
- Have we received consistent information and updates on requirements and expectations from the client?

### Special considerations for future fuels

- What novel procurement functions may support the emerging technical objectives?
- Have we discussed and addressed procurement limitations that might impact technical outcomes in future fuels?

### What Engineering Specified



### What Procurement Delivered



## Actively communicate with service providers and suppliers

Successful project procurement is dependent on open communication, effective information sharing and a trusting relationship among purchasers and suppliers/service providers. Service providers and suppliers should be informed of any issues or concerns and appropriately consulted for decision making to drive positive project outcomes.

Again, the novel technologies being used in future fuels make active communication critical for procurement success.

### Default practices

Ensure mechanisms/systems are in place for information sharing with suppliers/service providers.

### Key considerations – Purchasers

- For key suppliers and service providers, are there regular meetings at multiple organisational levels to maintain focus on key outcomes?
- Have we identified and addressed communication barriers and trust issues to ensure openness?
- Is our approach to relationships with suppliers/service providers proactive rather than reactive, i.e., do we actively engage with them or plan only to communicate regarding penalties if problems occur?
- Are there opportunities for shared office space or other facilities that would increase communication?

### Key considerations – Suppliers/Service providers

- Have issues and concerns been communicated early and frequently in meetings with the client and other relevant parties (e.g., sub-suppliers/subcontractors)?

### Special considerations for future fuels

- Have vendors been involved early in the design process?
- Have suppliers and service providers been adequately consulted in resolving emerging problems associated with adopting new technologies?





## Conduct sufficient independent inspection/assurance

Independent inspection is at the heart of procurement quality assurance. Inspection planning (including timing, scope and resourcing) is therefore key to successful procurement outcomes.

For future fuels, inspection is particularly critical given the dynamic environment and the nature of the vendors involved.

### Default practices

1. Systematically identify critical procurement items and services and set appropriate quality and inspection requirements.
2. Involve technical personnel in site inspections to ensure specification requirements are met.

### Key considerations – Purchasers

- Do we have sufficient control mechanisms at the interfaces that are critical to quality assurance?
- How would we know if a supplier or sub-supplier were providing fraudulent or counterfeit materials?
- Are we sure that the inspectors we are using will act independently and tell us about any issues identified?
- Do we actively address quality issues, or do we assume that relying on using suppliers with ISO quality accreditation is sufficient?
- Do we have adequate processes/plans to act upon issues identified in a timely manner?
- Do we have sufficient oversight of work quality by sub-suppliers (e.g., steel manufacturers) and subcontractor performance?

### Key considerations – Suppliers/Service providers

- Can the sub-suppliers/subcontractors meet criteria required by the prequalification process?
- Have overseas manufacturers been early engaged to understand requirements?

- Have compliance issues been considered, especially with overseas manufacturers? Have we had adequate supervision and audit mechanisms for compliance?
- Are third-party inspectors independent from vendors? Have we done sufficient onsite inspections at overseas manufacturers?
- Have we done additional checks early enough?

### Special considerations for future fuels

- Have we clearly specified requirements for testing and certification of new technologies?
- Who are the independent inspectors, and do they have the required skills for new and emerging technologies?
- Have we considered redundancy in layers of inspection in case one strategy fails because of a lack of experience with future fuels?



## Ensure changes are adequately managed

Any procurement activity will likely involve some revisions to scope and specifications as requirements change. It is important to ensure that changes are made for the right reasons and that all impacted parties are aware of current requirements.

Given the dynamic nature of future fuels technologies, procurement is likely to be subject to even more change than usual, so change management is particularly critical.

### Default practices

Ensure that any technical changes to approved design drawings and specifications are checked by those with appropriate technical knowledge and communicated to suppliers/service providers in a timely manner.

### Key considerations – Purchasers

- Is there a system for managing and communicating changes to approved drawings and specifications? Is it fit for purpose and working well?
- Is there a system to ensure that all stakeholders that are likely affected by a change are informed of the change?
- Are relevant stakeholders involved in assessing the impact of the change and consulted in decision making?
- Are we aware of the risks, complexity and level of controls required for adopting fast track, i.e., commencing construction or fabrication before the design is finalised?

### Key considerations – Suppliers/Service providers

- Have we received complete design information?
- Are we aware of any deviations from the original specifications/design?
- Has advice been provided to ensure what has been modified will be fit for purpose?
- Have we communicated any design changes to sub-suppliers/subcontractors in a timely manner?

- Have we considered all possible impacts (schedule, cost, quality, safety, etc.) of the modifications and communicated them to the client?

### Special considerations for future fuels

- Are changes required to keep up with current research captured and managed by our change management system?
- Have we sufficiently discussed the changes needed in design, manufacturing, construction and operation to accommodate new technologies and communicated them throughout the supply chain?
- Have we reviewed and revisited the assumptions in procurement planning to reflect the technical changes in the transition to future fuels?



## Consider logistics early and set up adequate logistics arrangements

Global supply chains and remote field sites mean that the logistics of getting purchased items to site without damage and in a timely manner presents a significant challenge. The potential for disruption has only increased in parallel with the increase in geopolitical conflicts and severe environmental events. Early identification and consideration of likely logistics issues are increasingly necessary for procurement success.

These considerations apply equally to future fuels procurement.

### Default practices

1. Clearly specify logistics requirements and responsibilities in procurement contracts.
2. Establish monitoring mechanisms to ensure logistics requirements and responsibilities are met.

### Key considerations – Purchasers

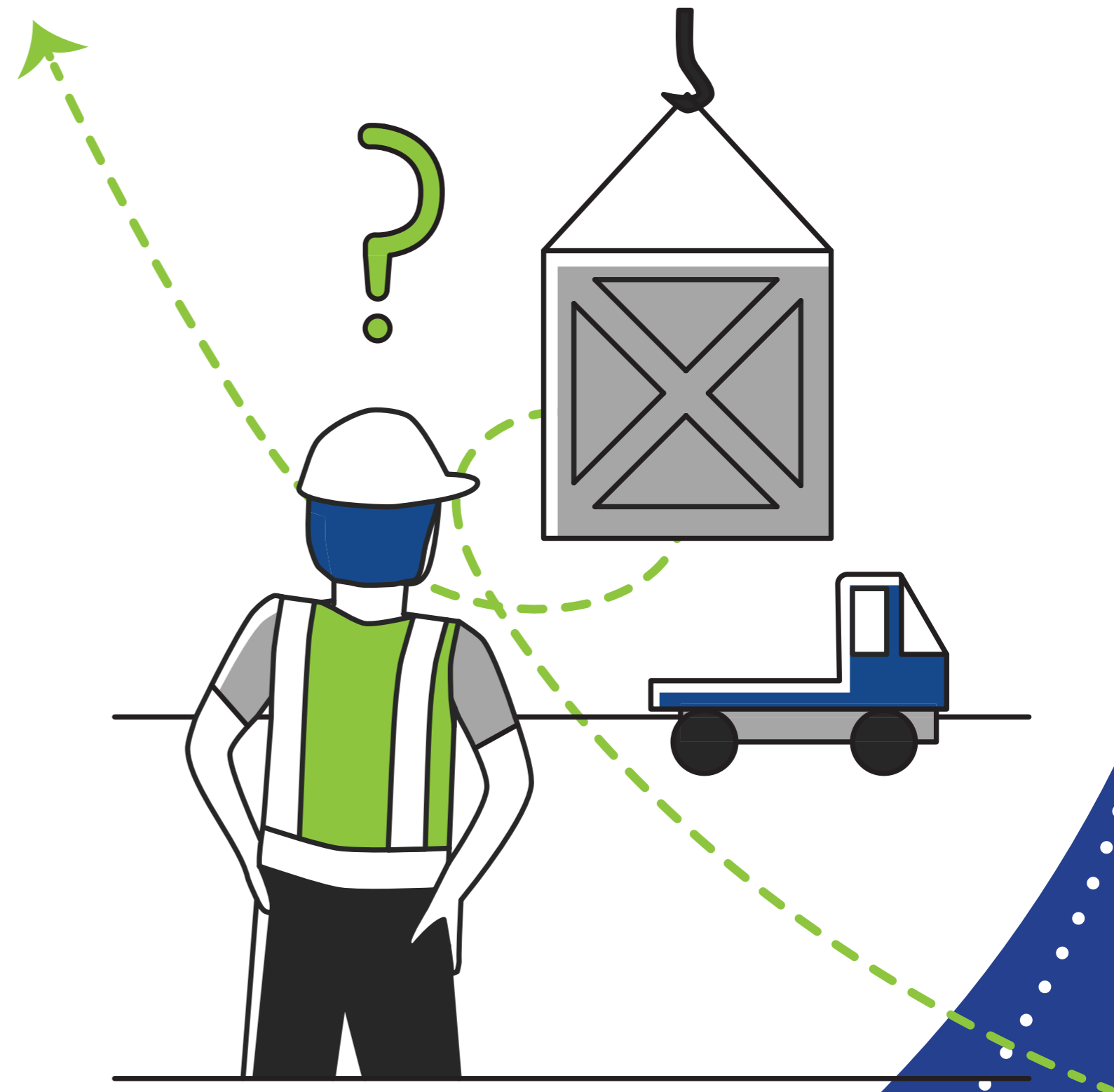
- Do we understand our biggest logistics risks? Have we considered external sources of disruption?
- Are there logistics risks beyond our experience? Where can we get help to manage them?
- Have we considered the impact of logistical interdependencies?
- Is responsibility for custody transfer clear for stakeholders at every stage?
- Do we understand customs clearance, duty and tax obligations at every stage?

### Key considerations – Suppliers/Service providers

- Have we considered all possible logistics risks that are within our responsibility and put sufficient arrangements in place to minimise them?
- Are custody transfer requirements clear, especially specific handover points in the contract terms?
- Are inspection plans in place to ensure that the condition of goods is known at all handover points?

### Special considerations for future fuels

- How do we adapt international experience on logistics for future fuels into the Australian context?
- Are there new considerations for packing and transporting products and equipment for future fuels projects?
- Are there any emerging logistical interdependencies in procurement for future fuels? How do we plan for them?



## Close out procurement mindfully

There is always a temptation to move on quickly to the next project, but it is important for improving procurement outcomes to ensure that procurement activities are closed out mindfully, i.e., with consideration of lessons to be learned from the procurement exercise and effective handover of the procured facilities.

Any experience in future fuels procurement will provide valuable lessons for future projects.

### Default practices

1. Document, exchange and record lessons on successes and failures for future procurement.
2. Provide relevant documentation and training to Operations/Maintenance and other relevant parties.

### Key considerations – Purchasers

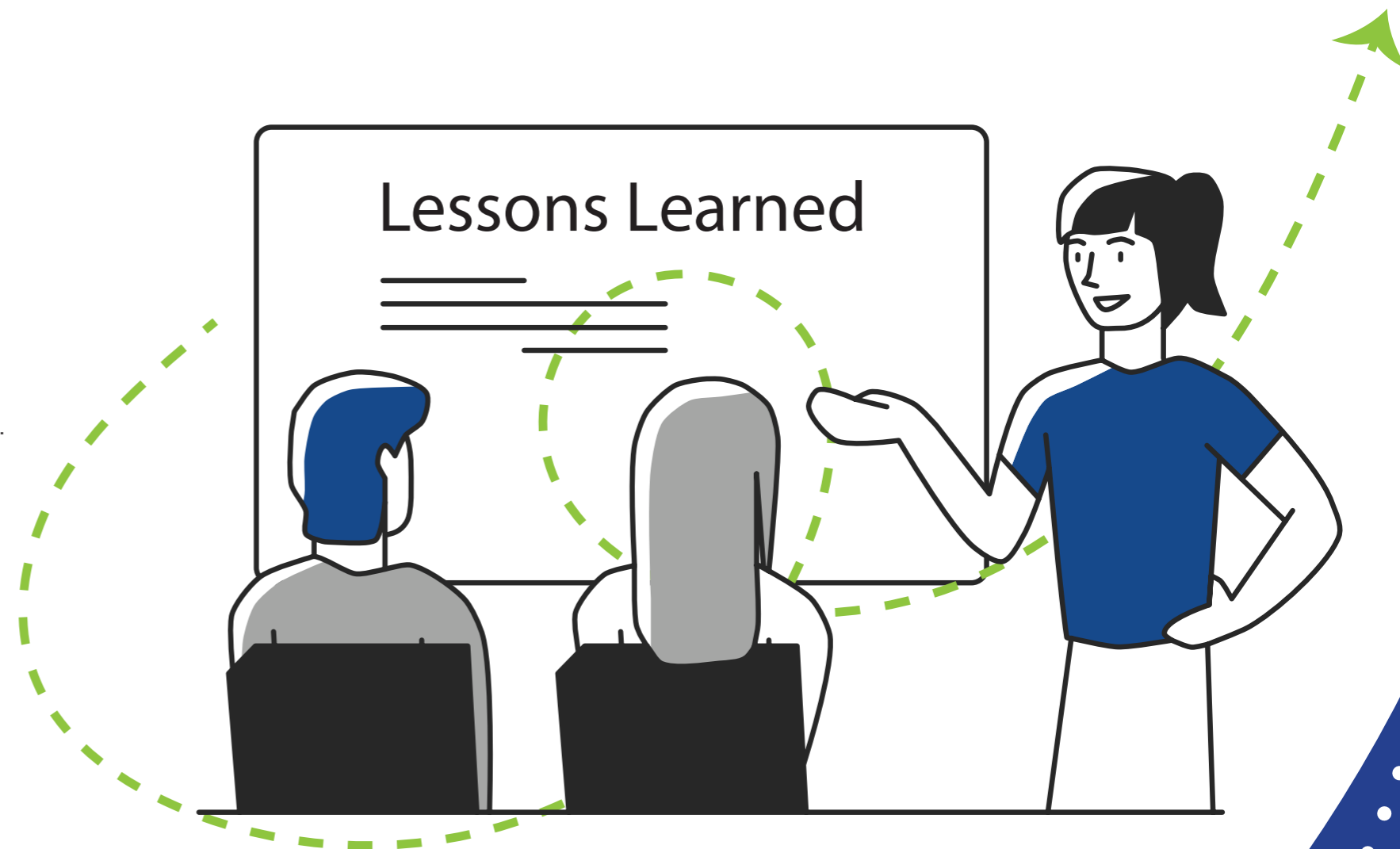
- Have we both sought and provided feedback on opportunities for improvement both internally and between organisations?
- Are there procurement lessons that we should communicate across our wider industry?
- Has all as-built information been collected and incorporated?
- Has all relevant vendor data been made available to Operations/Maintenance?
- Has all relevant training been organised/delivered?

### Key considerations – Suppliers/Service providers

- Have we shared lessons learned with and sought feedback from the client at the end of the work/service?
- Have we identified and recorded all issues to improve future services?
- Have we involved sub-suppliers/subcontractors in seeking lessons and learning for future improvement?

### Special considerations for future fuels

- Have we considered small trials of new procurement practices to integrate the feedback and lessons learned into major transformations to future fuels?





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