Rio Tinto

New Zealand Aluminium Smelters Ltd

2025

NZAS Overview

People

796
Employees

75
Contractors

2,200
approx
Jobs
indirectly
supported

Planet

2t/t aluminum
NZAS Carbon intensity

13t/t aluminum
International average

Numbers

333,689
Saleable tonnes

$96.1M
Wages & Salaries

6.1%
Regional GDP Contribution

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Carbon Our place in the world

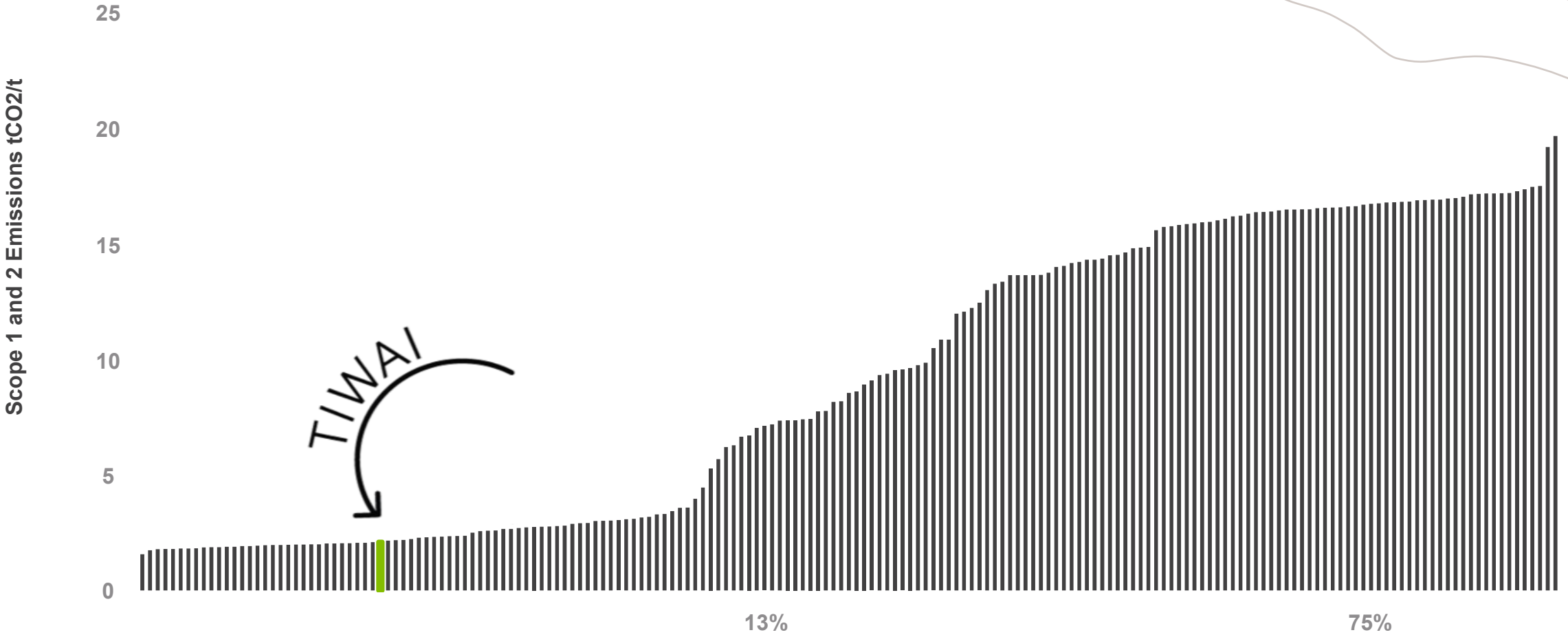
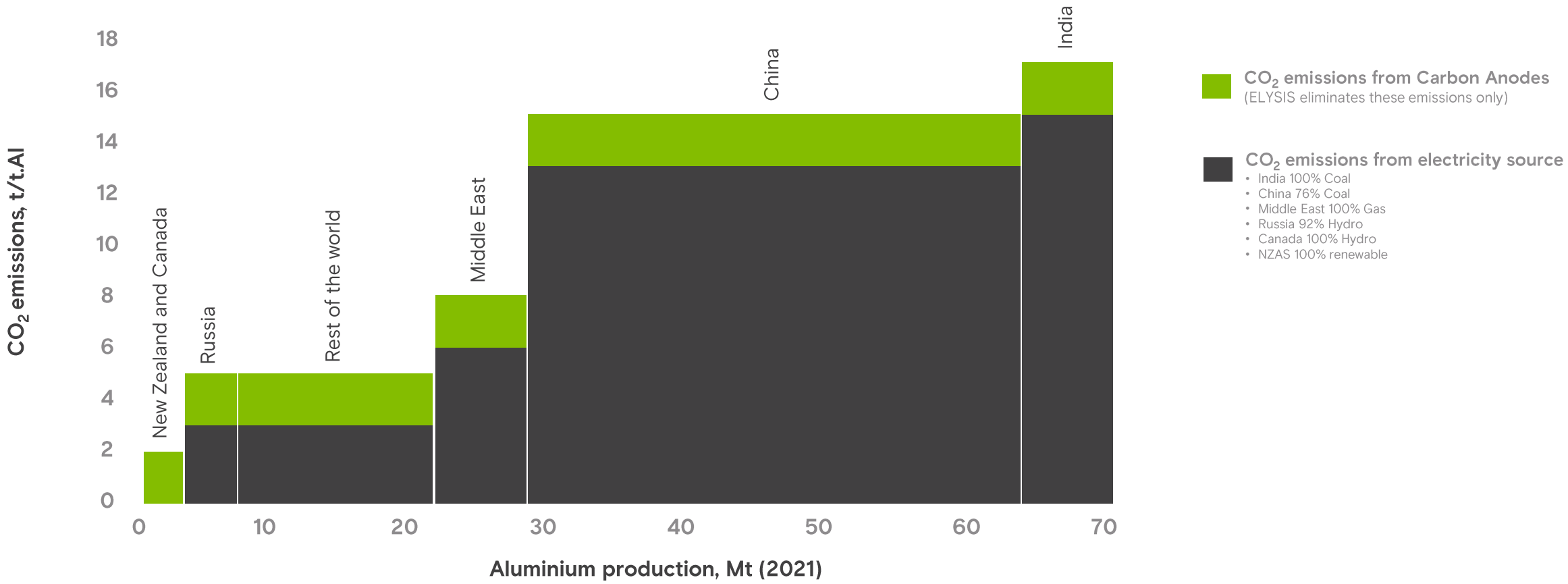


Chart source: Industry available information

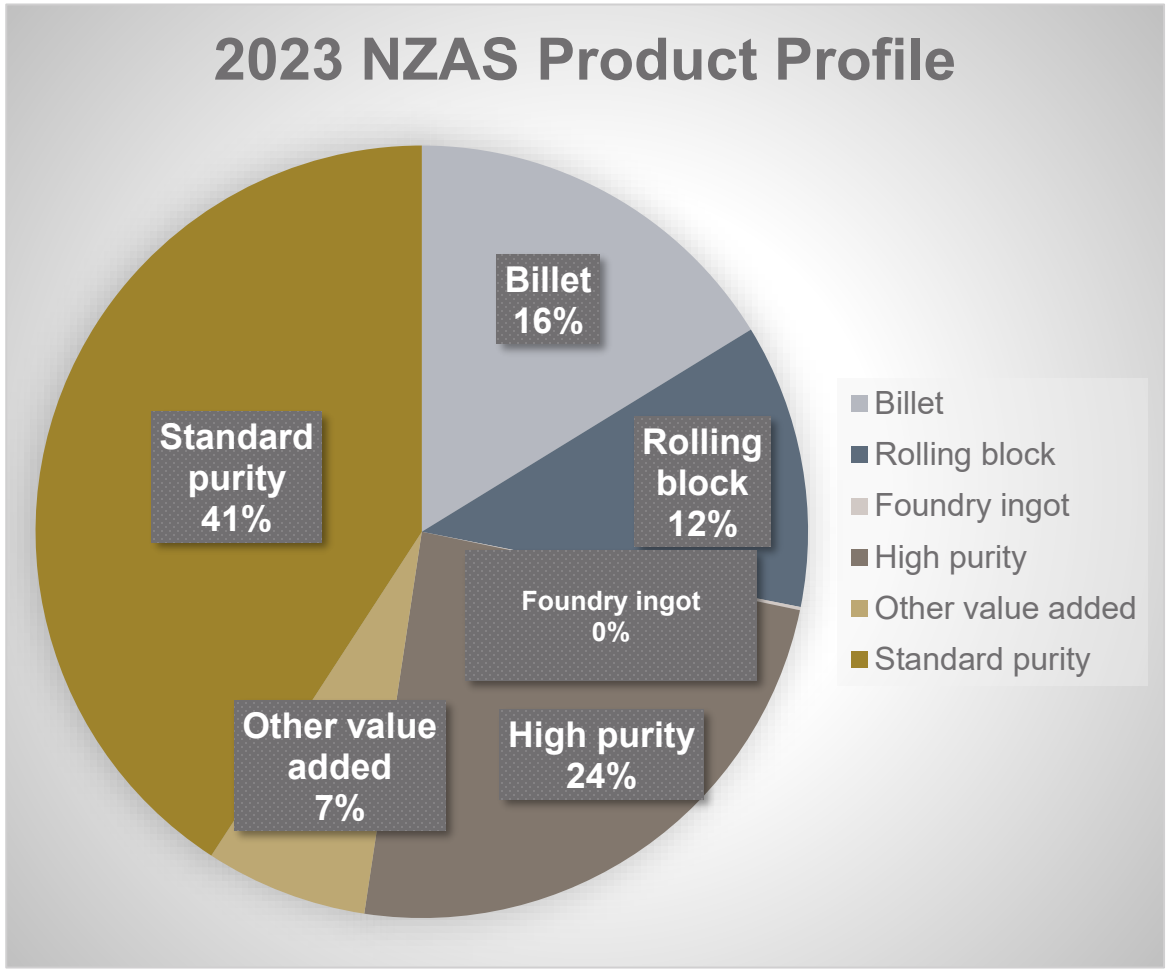
Carbon Smelters in the world

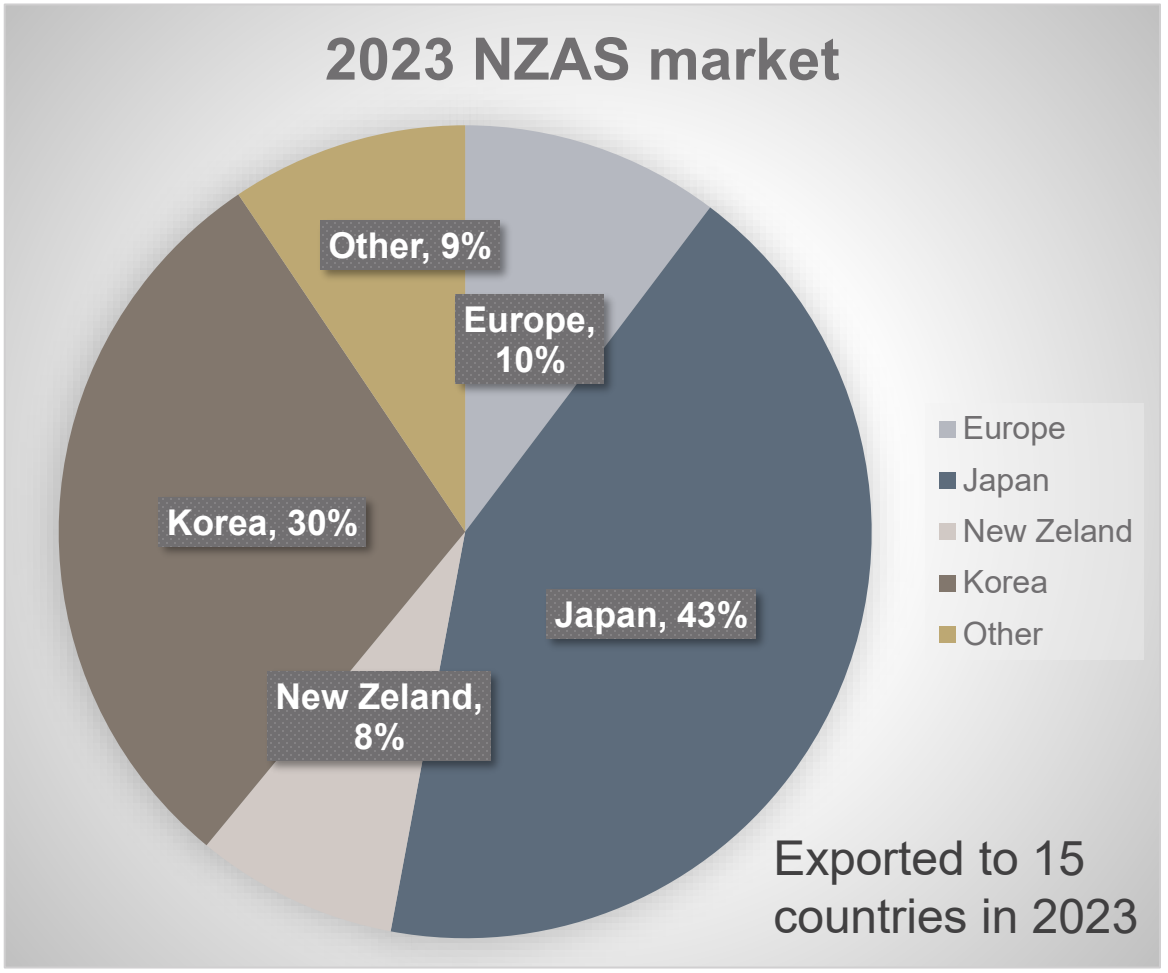
- Smelter CO_2 emissions are dominated by the CO_2 emissions of the electricity source.
- Renewable energies is a solution to reduce global CO_2 emissions and is available now.
- ELYSIS is a trial technology that proposes to eliminates the CO_2 emissions from the use of carbon anodes in the smelting process – it is currently in trial phase.
- A move to renewable energies would reduce global CO_2 emissions by ~610million tonnes per year compared to ~168 million tonnes per year using ELYSIS.



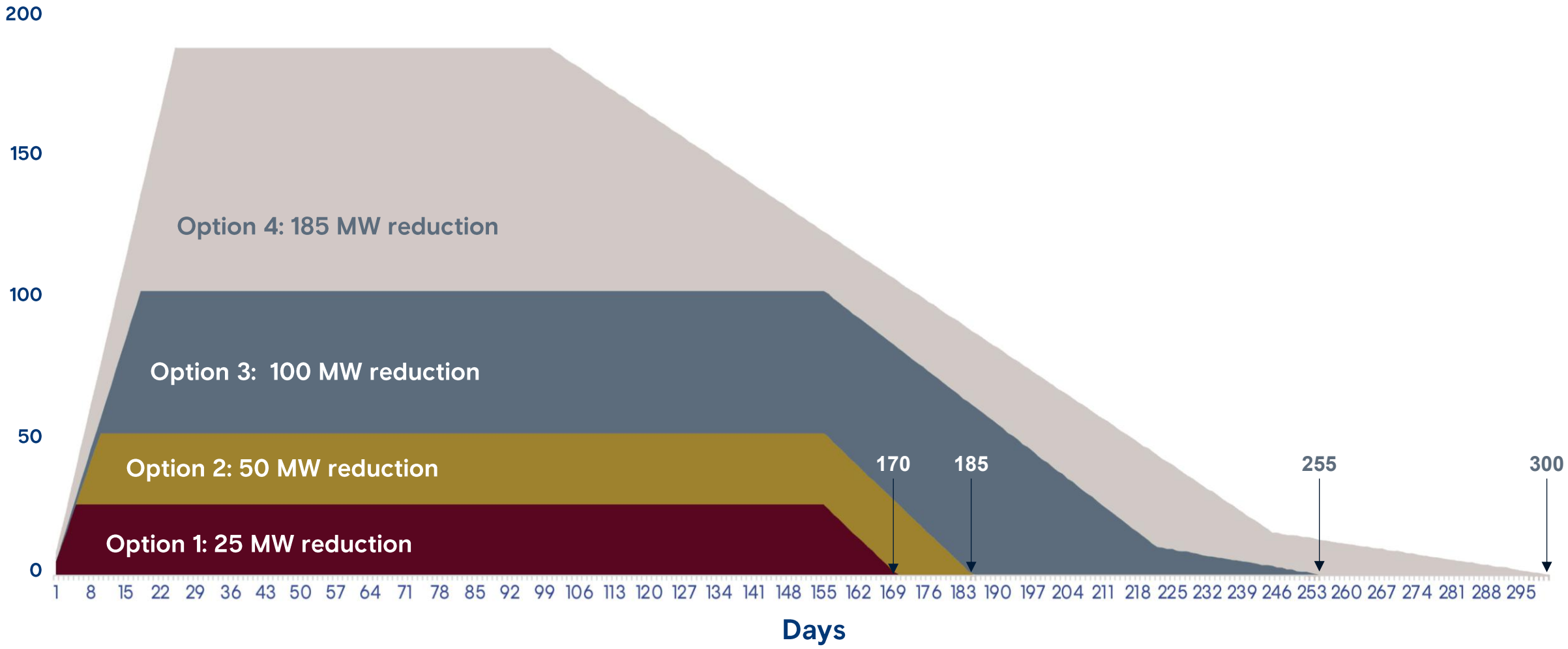
RioTinto Source: www.aluminium.ca and CRU 2021 data

NZAS Metal Products





DR MW Profiles MW at maximum call duration



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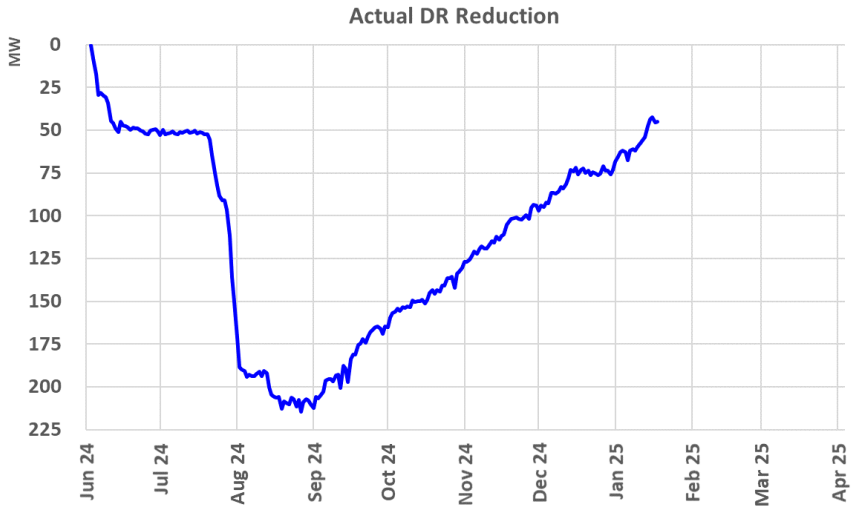
Timeline of 2024 DR Calls



30 May
New power contracts signed

3 Jul
New contracts effective

20 Aug
Additional 20MW removed [2]

12 Jun
50MW ramp down start

30 Jun
ramp down to 185MW starts

24 Aug
20MW ramp-up compete
185MW ramp-up starts

1 Jun 24 | 1 Jul 24 | 1 Aug 24 | 1 Sep 24 | 1 Oct 24 | 1 Nov 24 | 1 Dec 24 | 1 Jan 25 | 1 Feb 25 | 1 Mar 25 | 1 Apr 25 | 1 May 25

5 June
50MW option called under the 2023 DRA (max allowable)

21 Jun
50MW ramp down complete

21 Jul
185MW option called

10 Aug
185MW ramp down complete [1]

10 Sep
20MW ramp up starts

Now
Ramp-up 78% complete

12 Apr
185MW ramp up period ends under contract (200 days)

[1] 9 days earlier than specified in DRA following MEL request for NZAS to accelerate due to worsening storage situation. Meridian paid NZAS a significantly higher strike price for 100% of the accelerated portion of the reduction.

[2] MEL requested an additional 20MW reduction over and above the max reduction contracted. Meridian paid a significantly higher strike price for 100% of this additional volume.

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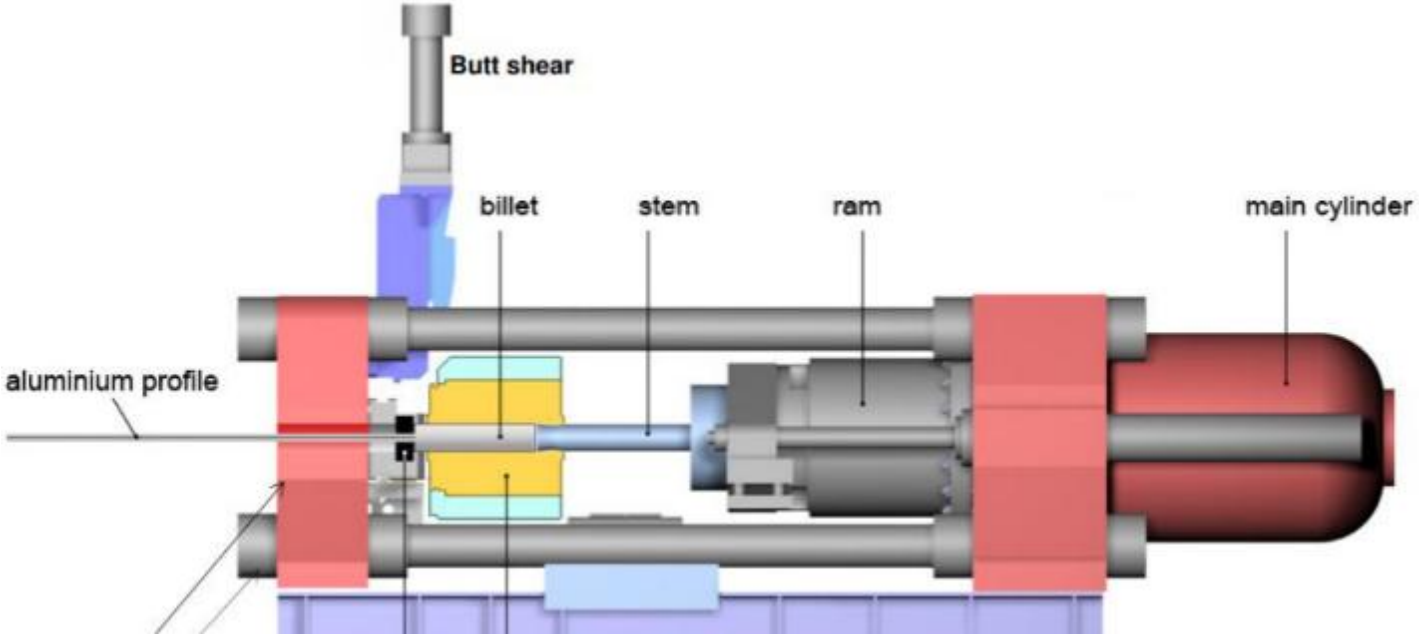
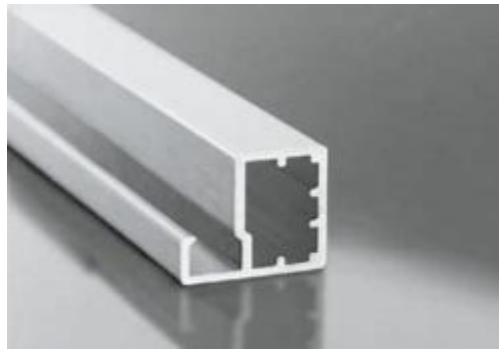
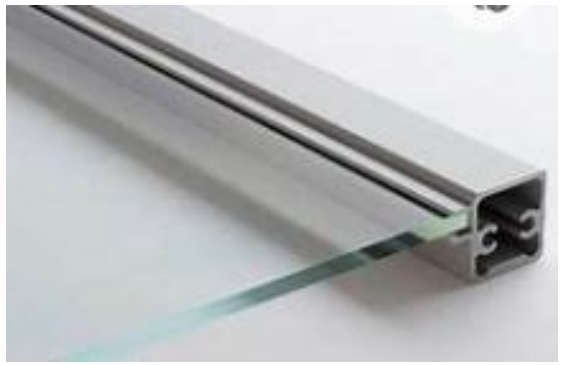
Billet

- Around 45% of the billet we cast is sold in NZ
- This is all 178 /203mm and sold to 1 of 4 extruders in NZ
- Majority of this goes into the B&C sector
  (90% of aluminium windows and doors in NZ from NZAS metal)







Extrusion Billet

Increasing use in demanding transport applications

ABS brake system pump body

Multiport condenser tubing for air conditioners

Shinkansen side panel extrusion profile

JR Central N700 series set Z28 on the Sanyo Shinkansen, April 2009

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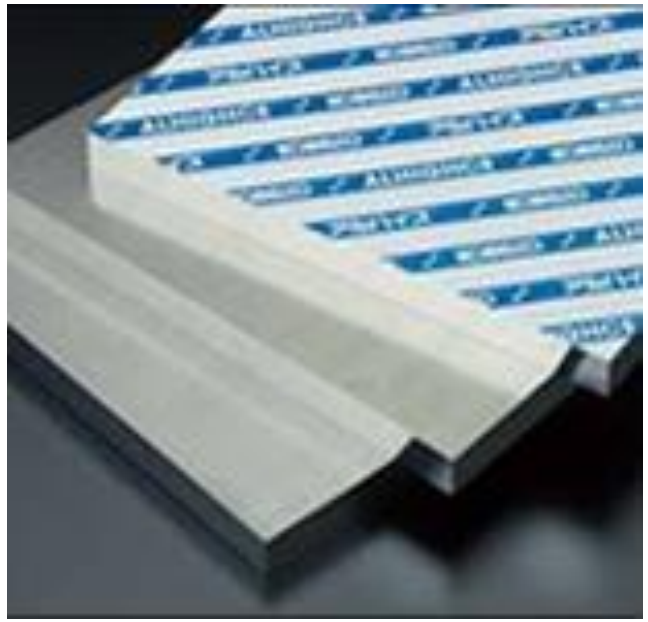
Rolling Slab

Light gauge (6 micron)
Tetrapak foil

Scalped rolling slab ready for hot mill

Food packaging foil



Super High Precision Aluminium Alloy Plate for Precision Machining ALJIGHCE

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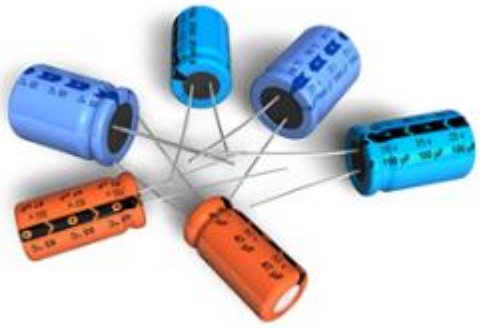
High Purity Ingot - Electronics Applications

Highest purity grades (99.96 to 99.98% Al) are mostly used in computer hard drive disks

From computer desktop encyclopaedia reproduced with permission

Inside view of a hard disk

Other purity grades (99.90 to 99.96% Al) are used for low and high voltage capacitor foil



Miniature low-voltage capacitors (next to a cm ruler)

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Foundry Ingot

Automotive and Motorcycle Wheels

Hamilton Jet Components

Aftermarket Auto Components

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HSE Framework within RT NZAS

Delivering next level performance

2024
Version 1.0

Safety Overview

5.5 SMM
6.0 Plan

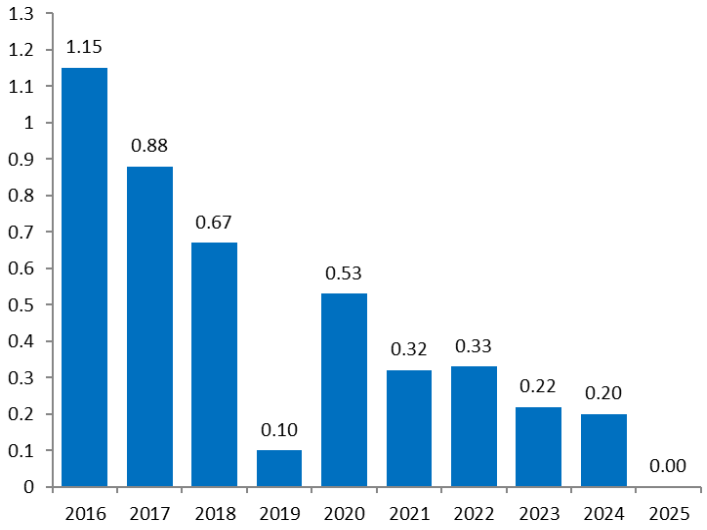
0.00 AIFR YTD
0.20 Plan 0.21 12m average

11.30 TCIFR (3MMA)
Plan decreasing 3MMA

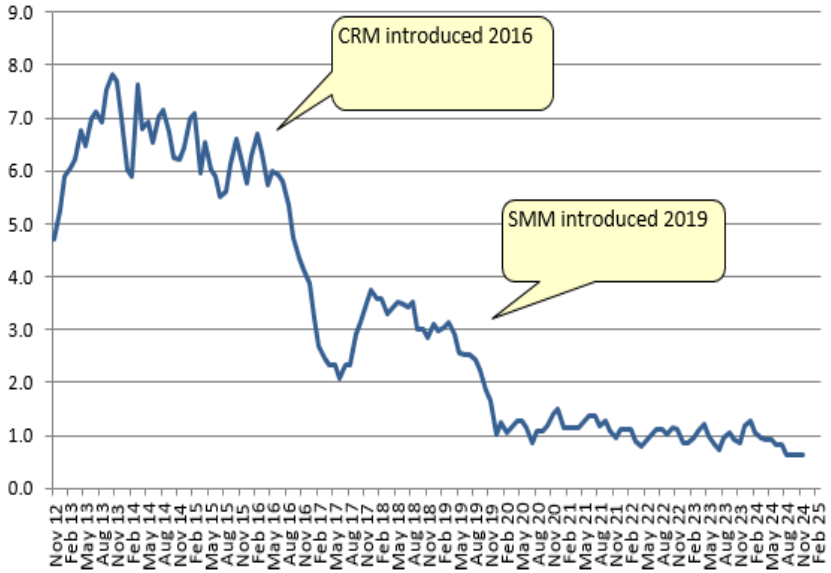
0 PFI
0 Plan

0 Occupational Illnesses
0 Plan

Our AIFR Journey
Sustained year on year improvement



Our Significant Incident Journey
Sustained focus on learning and elimination



AIFR

- 2024 continued the sustained reduction in AIFR since 2016 based on relentless focus on LiF and coaching.

Significant Incidents (PFI / SI / SPI)

- 2024 also saw sustained reduction in all significant incidents achieving our lowest rate ever.
- Focus remains on eliminating PFI events with 5 in 2024 .
- Critical learning & Replication will be our key focus in 2025.

Injury rates

- Heathy reporting culture with bulk of injuries reported of a minor nature.
- Leading cause of first aid injuries are contusion to hands and dust in eye.

2024 was a year for breaking records

410 days Injury free
Previous record 301 days

A rolled ankle in October 2024 brought our record-breaking run to an end, marking 410 days injury free.

The previous record of 301 had stood for over 20 years.

1004 days env incident free
Previous record 974 days

Not to be out done, our record for environmental performance was also broken recently. An exceedance of our drain license for fluoride concentration, the first in many years, brought that run to an end.

6 CRM Maturity
Maintained CRM Maturity

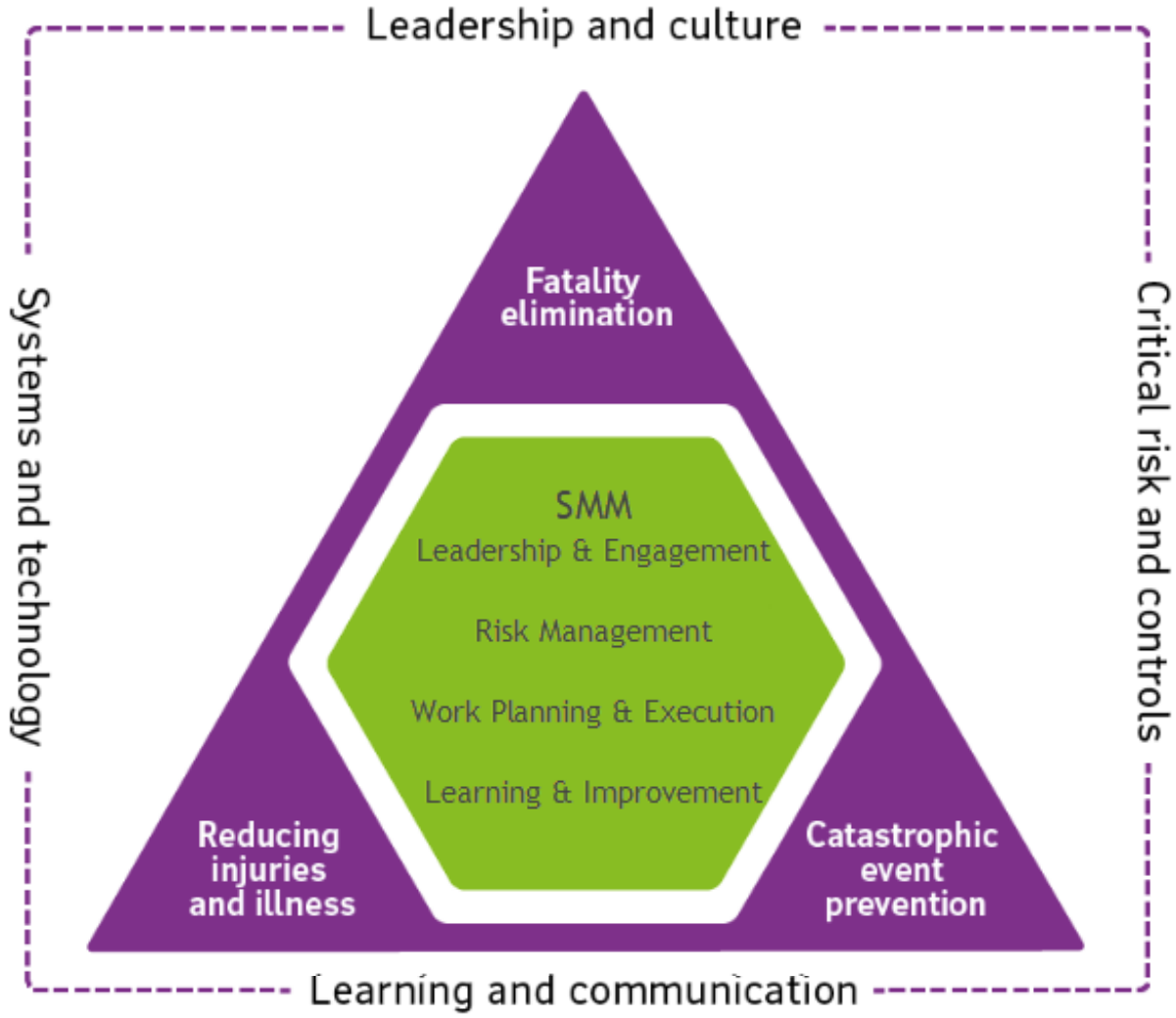
Tiwai maintained its CRM maturity score of 6.0 in 2024, placing us equal 3rd globally out of 48 operations and the highest ranked site in Pacific Operations on this key metric.

We will not let complacency be an outcome.
We treat each day as a new day and remain vigilant on removing the risks to our people, place and plant.

A Balanced Approach to Risk

A balanced approach to risk ensures all aspects of risk are covered in our operations including:

- Safety
- Psychosocial
- Health & hygiene
- Environment
- Communities
- Security
- Major hazards process safety



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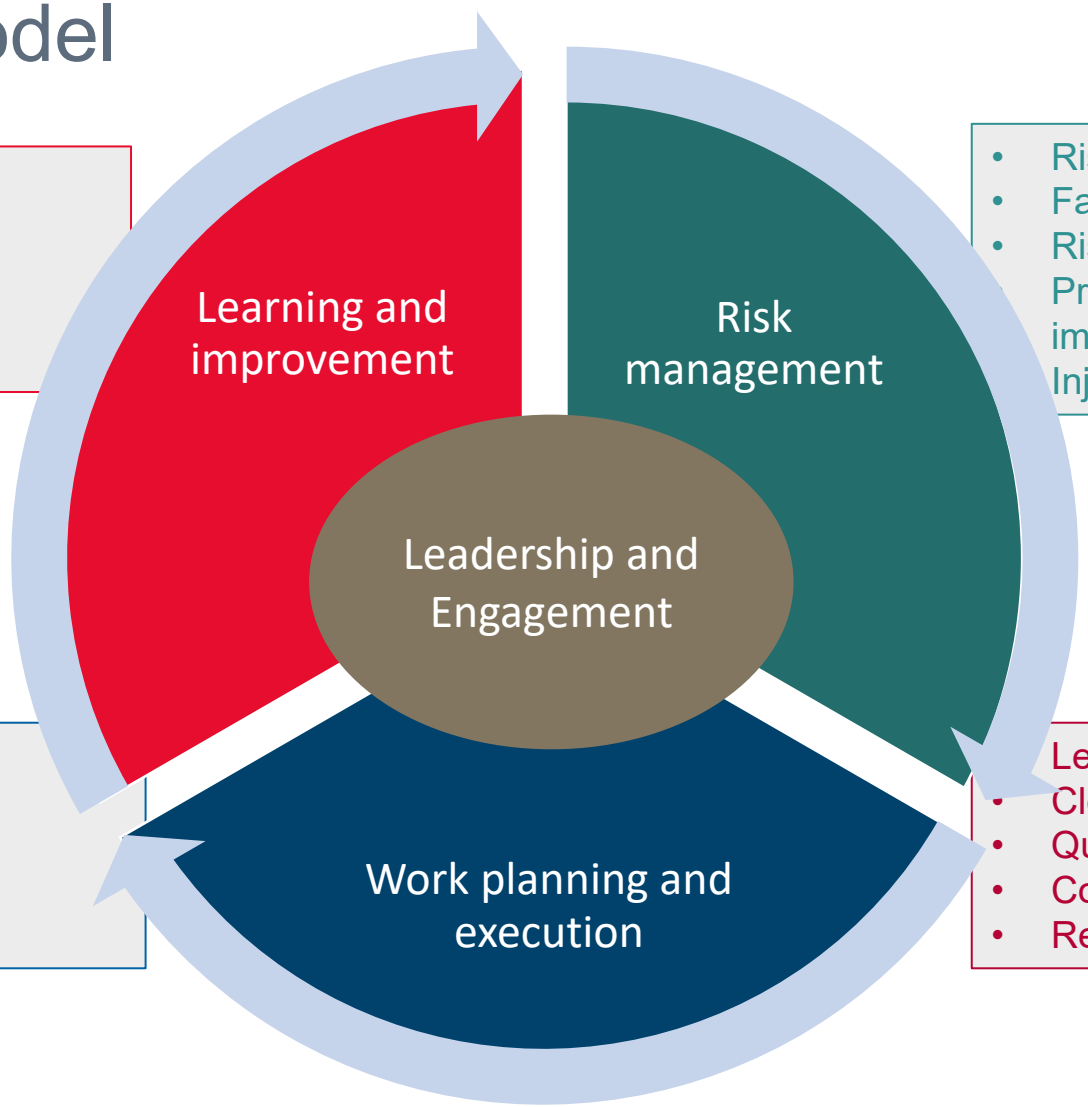
Leadership in HSE Safety Maturity Model

- Data insights
- Incident reporting and investigation
- Actions follow up
- Replication
- Timely sharing



- Risk knowledge and process
- Fatality prevention (CRM)
- Risk reduction
- Process Safety Management (PSM) implementation
- Injury management and reduction

- Work planning
- Cascaded communication
- Pre-task risk assessments
- Operational discipline
- Contractor management (CMX)

- Leader field time
- Clear safety expectations
- Quality pre-start meetings
- Coaching
- Recognition and feedback

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Safety Leadership

Excelling in safety leadership is critical, especially during difficult times

The ‘Safety Maturity Model’ was introduced in 2019

Annual external assessments.

Safety Maturity Model | Criteria

Leadership & Engagement	L1.1 - **Leadership competencies, behaviours and genuine care** Focus areas: Field time, leader rituals including genuine care attributes
	L1.2 - **Pre-shift meetings** Focus areas: Quality pre-shift meetings driving team engagement and ownership
	L1.3 - **Coaching** Focus areas: Technique, effectiveness and feedback and future leaders
	L1.4 - **Communication, recognition and performance feedback** Focus areas: Communicating safety performance, cascading safety information, addressing unwanted/undesired behaviours (including sexual harassment, racism and bullying) and recognising/rewarding desired behaviours
Risk Management	R2.1 - **Balanced approach to risk** Focus areas: Balanced risk management, Understanding your risks and hierarchy of control
	R2.2 - **Health and environment operational ownership** Operational ownership of Health and Environment guidance, communication and rituals (move from compliance to excellence)
	*R2.3 - **Maintaining CRM maturity** Focus areas: CRM system and governance, quality verifications, data analysis, CRM non-conformances, (share, learn and improve)
	R2.4 **Risk Systems** Focus areas: Core systems supporting risk and control knowledge - first party assurance & change management
Work Planning & Execution	W3.1 - **Work planning, management and operational discipline** Focus areas: Conformance to plan, contractor management, PPE, housekeeping and maintenance health
	W3.2 - **Pre-task risk assessments** Focus areas: Quality pre-task risk assessments and effectiveness of controls
Learning and Improvement	*I4.1 - **Incident reporting and investigations** Focus areas: Incident reporting, investigations and action management
	I4.2 - **Critical learning and replication*** Focus areas: Learning critical lessons and replicating learnings

Basic → Evolving → Advanced

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Leadership in the Field

Dedicated time in field every shift

"Visible Engaging Leadership"

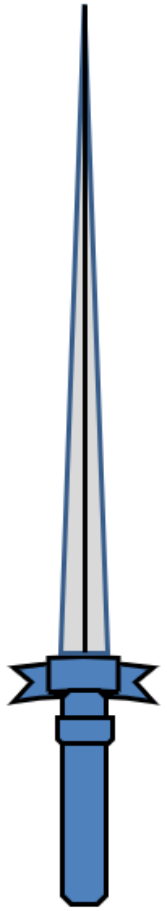
Coaching

Safety interactions

Critical control verifications

Potential upside when done well

- Leaders have engaging conversations with people feeling supported and listened too
- Previous conversations are followed through (we do what we say we will do)
- Leaders can identify & give positive tokens in the workplace when people go above & beyond
- Leaders identify and challenge non-conformance and call out regression
- People feel leaders care about them beyond the context of the work environment
- Leaders take the time to explain the linkages between great work to the vision and purpose
- Leaders give feedback on the status of actions and improvement work before being asked
- Leaders take the time to coach and develop people in the workplace



Traps to avoid

- Leaders only see & talk to people when something is wrong
- Previous conversations/promises are never referred too by leaders
- Leaders walk past less safe acts effectively condoning them
- Leaders don't identify or say anything when people go the extra mile
- Leaders fail to acknowledge team members as they walk around the plant
- Discussions centre only on the task at hand giving people a feeling that they are appreciated for their physical presence as a set of arms and legs not unique & talented individuals
- Leaders reward behaviours that are known by the crew to be a racket
- Leaders acknowledge and reward hero productivity behaviours

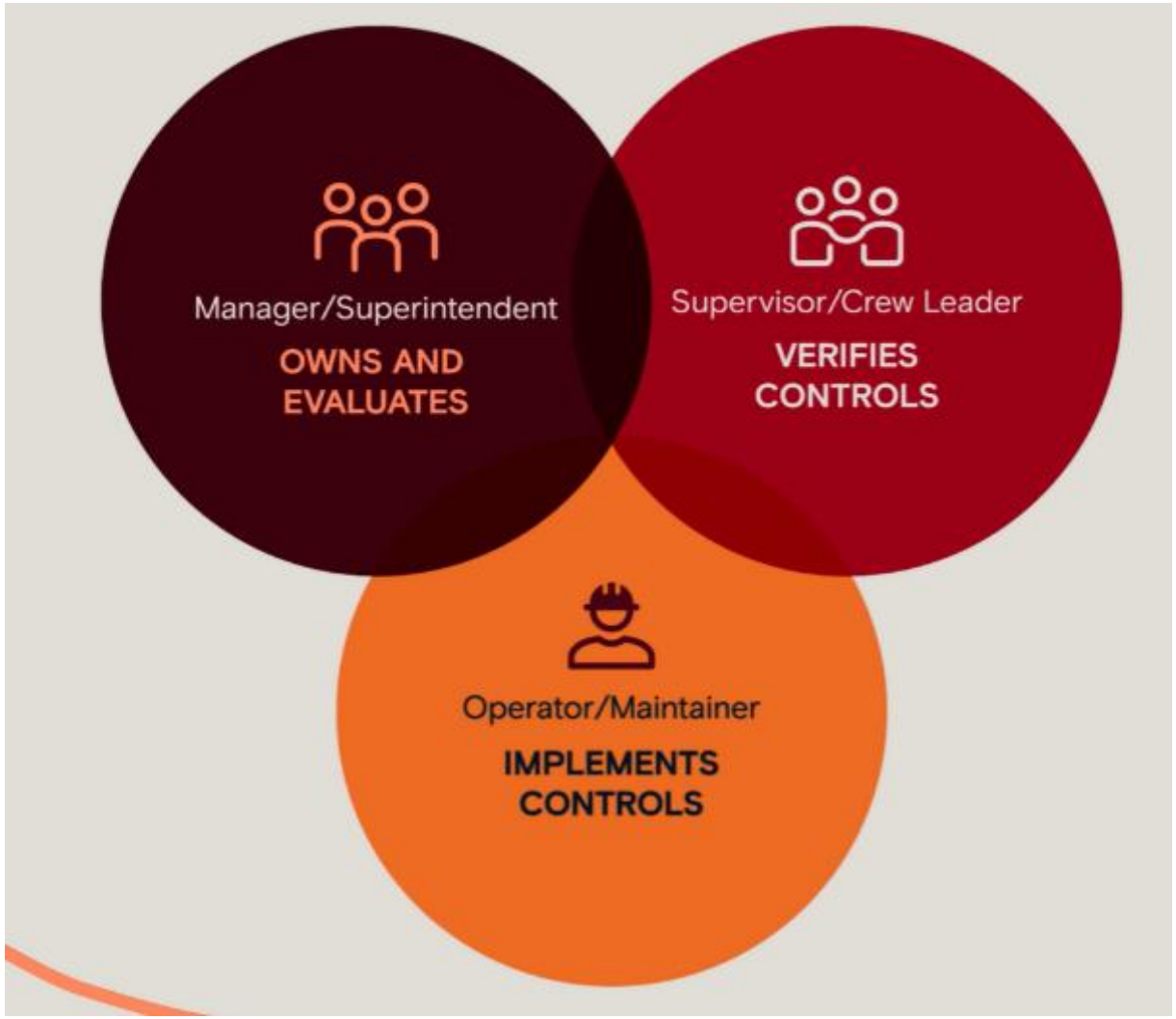
Double edged sword analogy

Eliminating Fatality Risks
Critical Risk Management

Critical Controls identified for all Critical Risks

Critical Controls verified in field

Eliminating Fatality Risks
Critical Risk Management



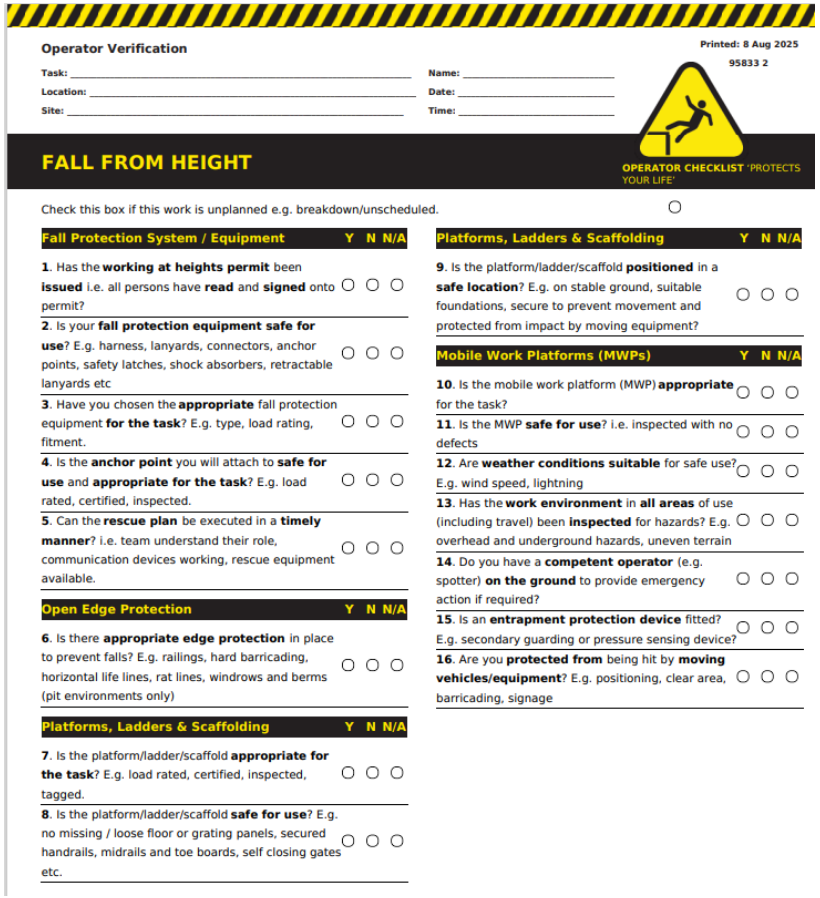
Senior leaders own the system and evaluate its effectiveness

Crew Leaders perform Critical Control verifications during shift based on risk

Operator / maintainers implement critical controls in the field and verify using Critical Control Checklists

Critical Risk Management

Frontline Teams
Am I working safely?



Operator Verification

Printed: 8 Aug 2025
95833 2

Task: _____ Name: _____
Location: _____ Date: _____
Site: _____ Time: _____

FALL FROM HEIGHT

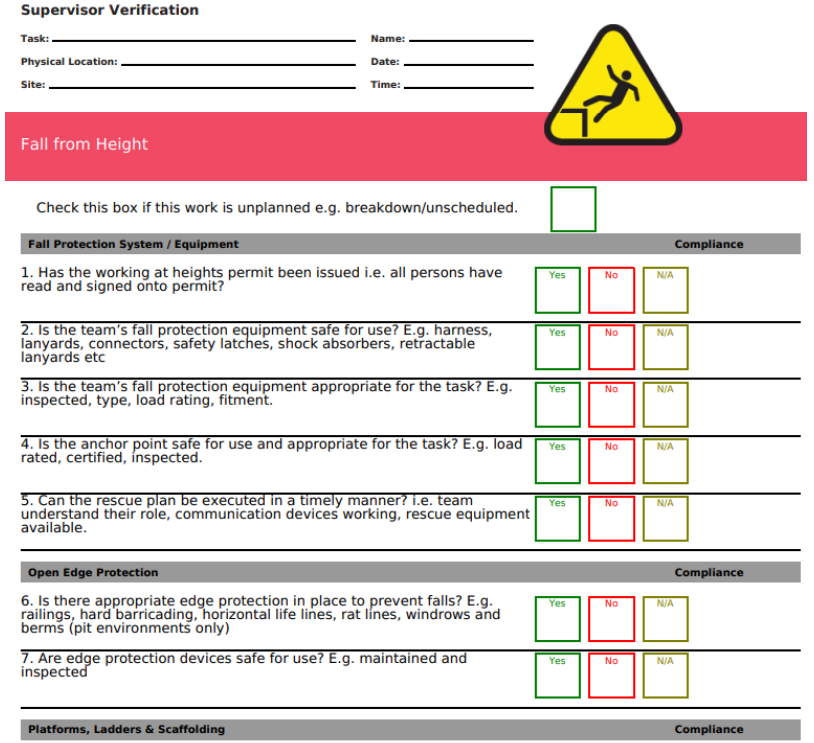
OPERATOR CHECKLIST 'PROTECTS YOUR LIFE'

Check this box if this work is unplanned e.g. breakdown/unscheduled. ○

Fall Protection System / Equipment	Y	N	N/A
1. Has the **working at heights permit** been **issued** i.e. all persons have **read** and **signed** onto permit?	○	○	○
2. Is your **fall protection equipment safe for use**? E.g. harness, lanyards, connectors, anchor points, safety latches, shock absorbers, retractable lanyards etc	○	○	○
3. Have you chosen the **appropriate** fall protection equipment **for the task**? E.g. type, load rating, fitment.	○	○	○
4. Is the **anchor point** you will attach to **safe for use** and **appropriate for the task**? E.g. load rated, certified, inspected.	○	○	○
5. Can the **rescue plan** be executed in a **timely manner**? i.e. team understand their role, communication devices working, rescue equipment available.	○	○	○
Open Edge Protection	**Y**	**N**	**N/A**
6. Is there **appropriate edge protection** in place to prevent falls? E.g. railings, hard barricading, horizontal life lines, rat lines, windrows and berms (pit environments only)	○	○	○
Platforms, Ladders & Scaffolding	**Y**	**N**	**N/A**
7. Is the platform/ladder/scaffold **appropriate for the task**? E.g. load rated, certified, inspected, tagged.	○	○	○
8. Is the platform/ladder/scaffold **safe for use**? E.g. no missing / loose floor or grating panels, secured handrails, midrails and toe boards, self closing gates etc.	○	○	○

Platforms, Ladders & Scaffolding	Y	N	N/A
9. Is the platform/ladder/scaffold **positioned** in a **safe location**? E.g. on stable ground, suitable foundations, secure to prevent movement and protected from impact by moving equipment?	○	○	○
Mobile Work Platforms (MWPs)	**Y**	**N**	**N/A**
10. Is the mobile work platform (MWP) **appropriate** for the task?	○	○	○
11. Is the MWP **safe for use**? i.e. inspected with no defects	○	○	○
12. Are **weather conditions suitable** for safe use? E.g. wind speed, lightning	○	○	○
13. Has the **work environment** in **all areas** of use (including travel) been **inspected** for hazards? E.g. overhead and underground hazards, uneven terrain	○	○	○
14. Do you have a **competent operator** (e.g. spotter) **on the ground** to provide emergency action if required?	○	○	○
15. Is an **entrapment protection device** fitted? E.g. secondary guarding or pressure sensing device?	○	○	○
16. Are you **protected from** being hit by **moving vehicles/equipment**? E.g. positioning, clear area, barricading, signage	○	○	○

Frontline Supervisors
Is my team working safely?



Supervisor Verification

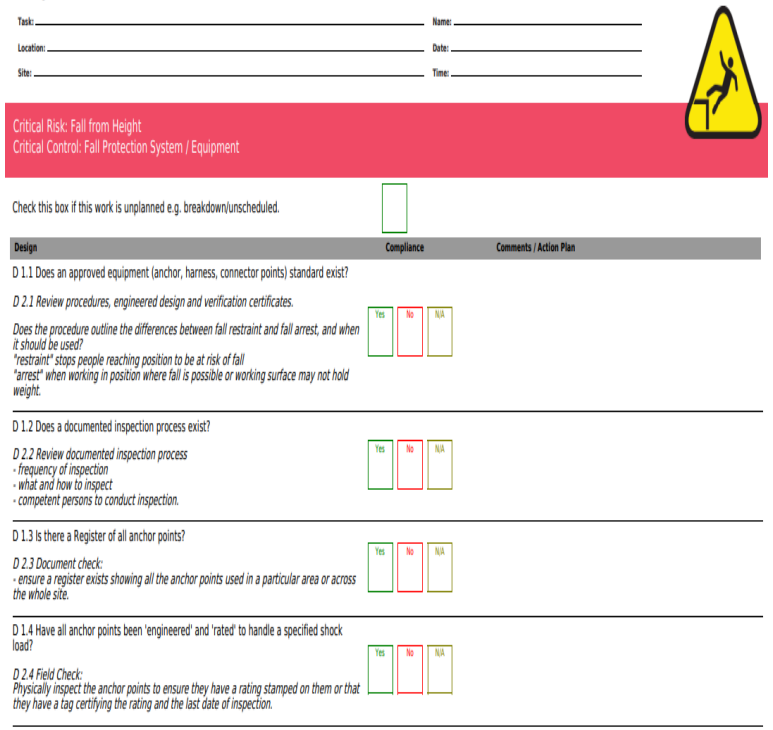
Task: _____ Name: _____
Physical Location: _____ Date: _____
Site: _____ Time: _____

Fall from Height

Check this box if this work is unplanned e.g. breakdown/unscheduled. ☐

Fall Protection System / Equipment	Compliance		
1. Has the working at heights permit been issued i.e. all persons have read and signed onto permit?	Yes	No	N/A
2. Is the team's fall protection equipment safe for use? E.g. harness, lanyards, connectors, safety latches, shock absorbers, retractable lanyards etc	Yes	No	N/A
3. Is the team's fall protection equipment appropriate for the task? E.g. inspected, type, load rating, fitment.	Yes	No	N/A
4. Is the anchor point safe for use and appropriate for the task? E.g. load rated, certified, inspected.	Yes	No	N/A
5. Can the rescue plan be executed in a timely manner? i.e. team understand their role, communication devices working, rescue equipment available.	Yes	No	N/A
Open Edge Protection	**Compliance**		
6. Is there appropriate edge protection in place to prevent falls? E.g. railings, hard barricading, horizontal life lines, rat lines, windrows and berms (pit environments only)	Yes	No	N/A
7. Are edge protection devices safe for use? E.g. maintained and inspected	Yes	No	N/A
Platforms, Ladders & Scaffolding	**Compliance**		

Critical Control Owner
Are my critical controls effective?



Manager Verification

Task: _____ Name: _____
Location: _____ Date: _____
Site: _____ Time: _____

Critical Risk: Fall from Height
Critical Control: Fall Protection System / Equipment

Check this box if this work is unplanned e.g. breakdown/unscheduled. ☐

Design	Compliance			Comments / Action Plan
D 1.1 Does an approved equipment (anchor, harness, connector points) standard exist?				
D 2.1 Review procedures, engineered design and verification certificates. *Does the procedure outline the differences between fall restraint and fall arrest, and when it should be used?* *"restraint" stops people reaching position to be at risk of fall* *"arrest" when working in position where fall is possible or working surface may not hold weight.*	Yes	No	N/A	
D 1.2 Does a documented inspection process exist?				
D 2.2 Review documented inspection process *◦ frequency of inspection* *◦ what and how to inspect* *◦ competent persons to conduct inspection.*	Yes	No	N/A	
D 1.3 Is there a Register of all anchor points?				
D 2.3 Document check: *◦ ensure a register exists showing all the anchor points used in a particular area or across the whole site.*	Yes	No	N/A	
D 1.4 Have all anchor points been 'engineered' and 'rated' to handle a specified shock load?				
D 2.4 Field Check: *Physically inspect the anchor points to ensure they have a rating stamped on them or that they have a tag certifying the rating and the last date of inspection.*	Yes	No	N/A	

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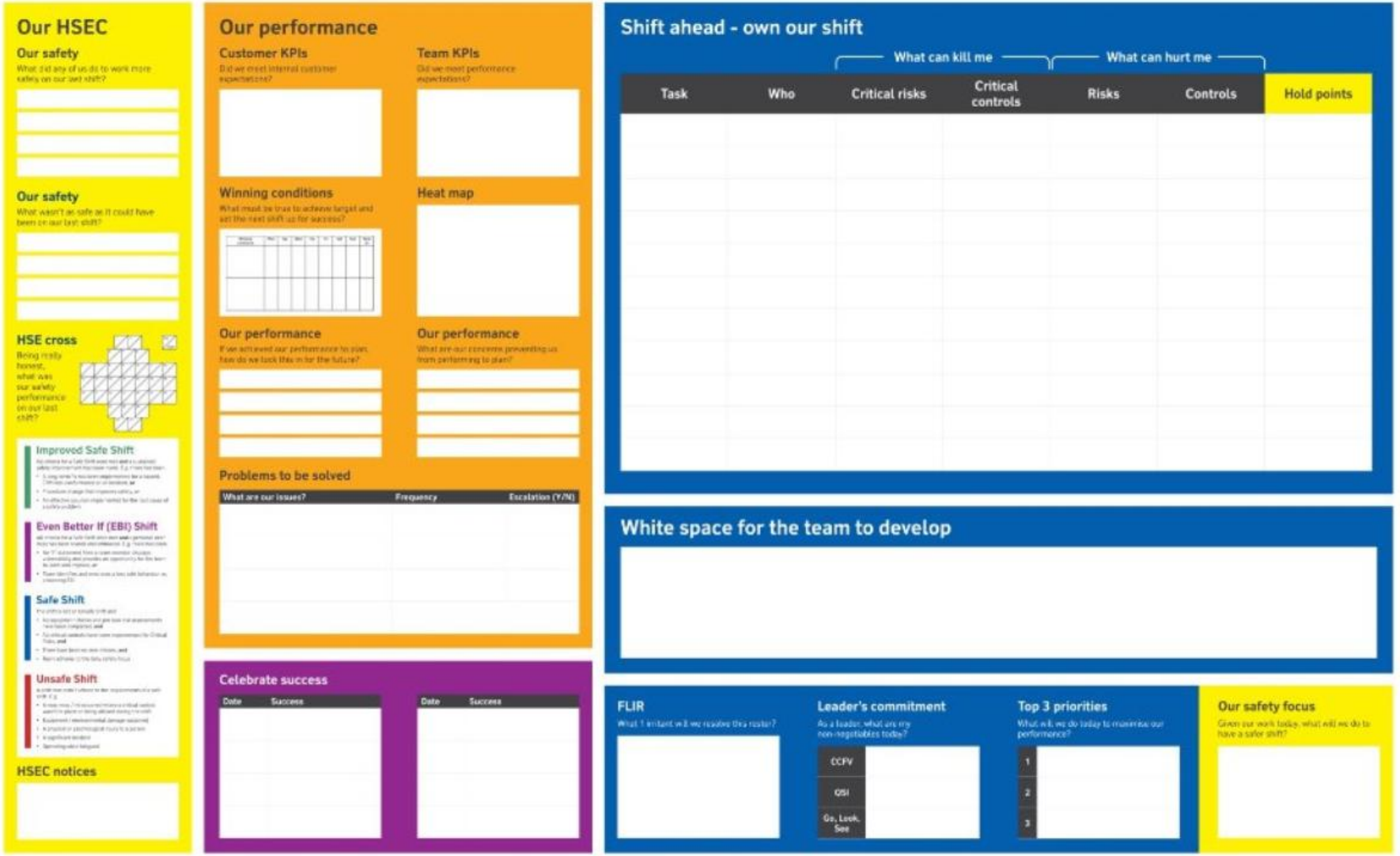
Safety begins at Shift Start

Global shift start standard



Safety begins at Shift Start

Global shift start standard

Best Practice Process | Shift Start

Safety

Purpose

- Team honestly reflects on safety performance from last shift
- Reflection includes safety focus from last shift
- Use this information to improve or sustain future safety

HSE cross

- Team reflects on the safety performance and provides a rating
- Multiple people sharing views using the language of the rating not just a colour (“blue day”)
- Able to talk to the improved process or behaviour and how it will be sustained

What good looks like

- Leader uses genuine inquiry to understand
- Team members reflect on their own behaviours and are willing to share
- Honesty is celebrated
- Team owns safety performance and doesn’t focus on external factors
- Team members show ownership rather than assigning blame or excuses
- Open discussion on safety behaviours with a focus on learnings to drive improvement

Improved Safe Shift

All criteria for a Safe Shift were met **and** a sustained safety improvement has been made. E.g. there has been:

- A long-term fix has been implemented for a hazard, CRM non-conformance or an incident, **or**
- Procedure change that improves safety, **or**
- An effective solution implemented for the root cause of a safety problem

Even Better If (EBI) Shift

All criteria for a Safe Shift were met **and** a personal near miss has been shared and embraced. E.g. there has been:

- An “I” statement from a team member displays vulnerability and provides an opportunity for the team to learn and improve, **or**
- Team identifies and embraces a less safe behaviour as a learning EBI

Safe Shift

The shift is not an Unsafe Shift and

- All equipment checks and pre task risk assessments have been completed, **and**
- All critical controls have been implemented for Critical Risks, **and**
- There have been no near misses, **and**
- Team adheres to the daily safety focus

Unsafe Shift

A shift that didn’t adhere to the requirements of a safe shift. E.g

- A near miss / hit occurred where a critical control wasn’t in place or being utilised during the shift
- Equipment / environmental damage sustained
- A physical or psychological injury to a person
- A significant incident
- Operating while fatigued

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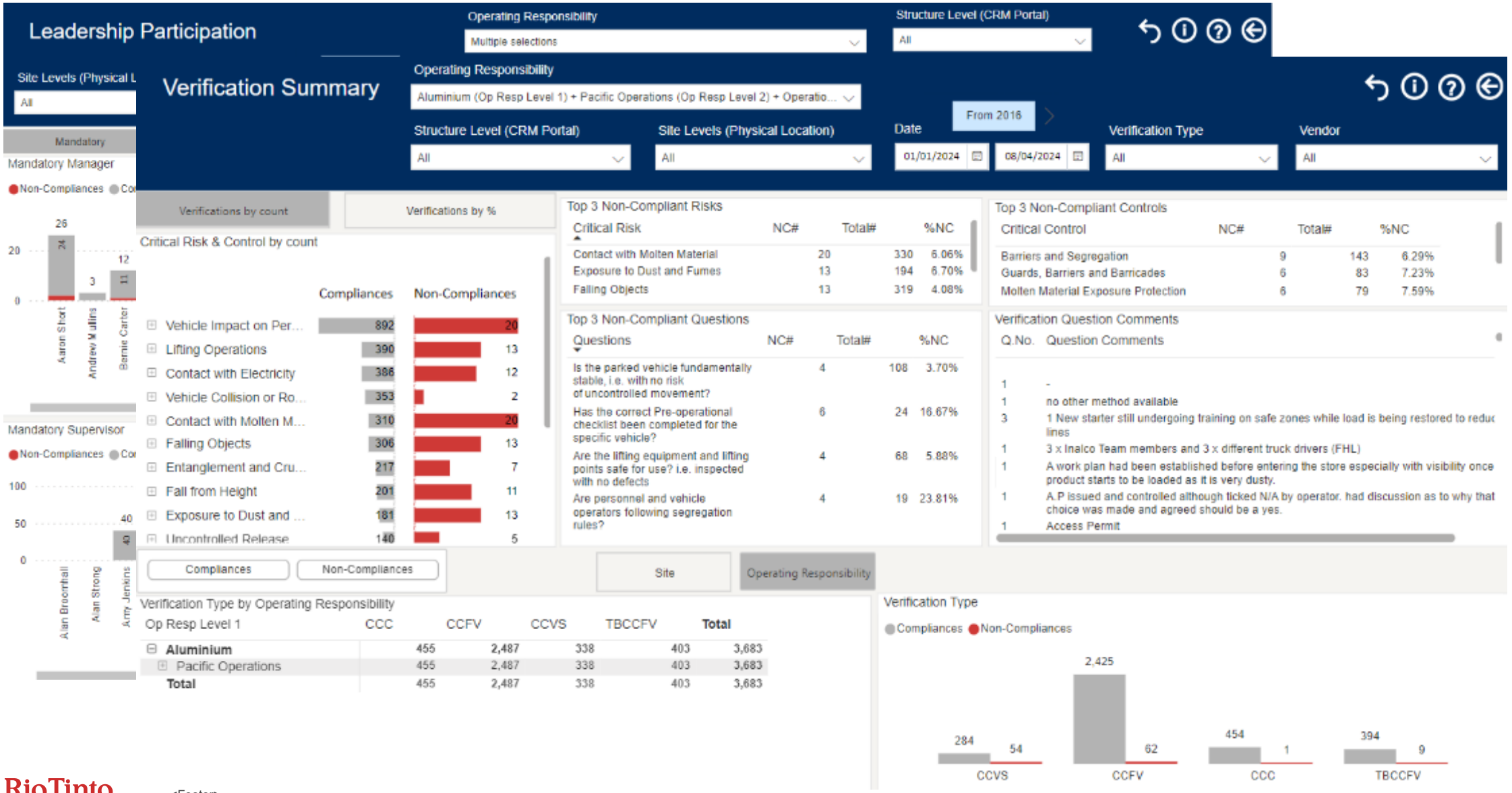
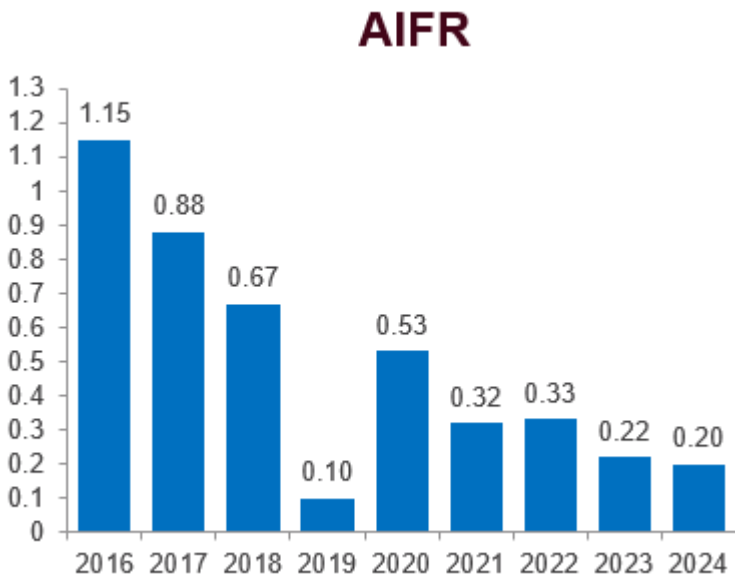
Learn & Improve



Where are we now?

2024



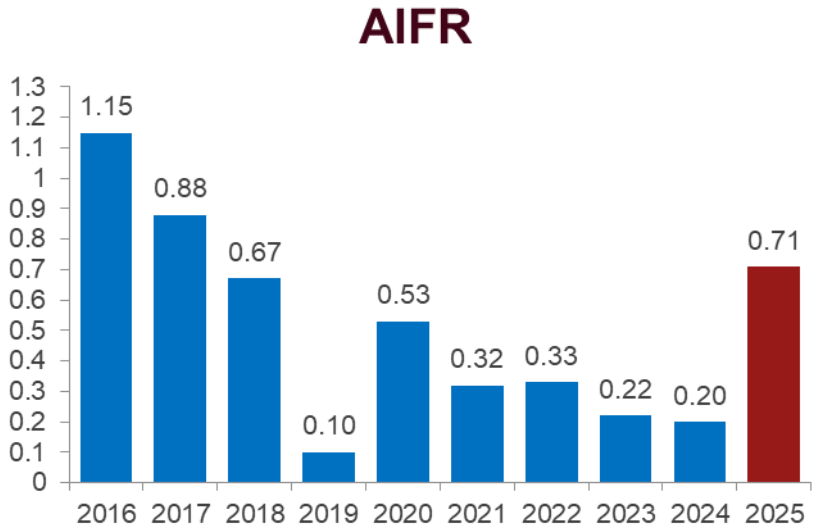
410 days injury free

A rolled ankle in October 2024 brought our record-breaking run to an end, marking 410 days injury free.

Previous record 301 days which stood for over 20 years.

What changed ?

2025



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