



**September 2023**

# **BUSINESS PROPOSAL**

Ensuring sustainability in alignment  
with the CSIRO global megatrends

**PREPARED FOR:**

Port Waratah Coal Services

**PREPARED BY:**

FuturEdge Consulting







**FuturEdge acknowledge the traditional custodians of the land on which this document was prepared, The Awabakal and Worimi peoples.**

**We recognise and respect their cultural heritage, beliefs and enduring relationship with the land.**

**We pay respect to knowledge holders and community members of the land and Elders past, present and emerging.**





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# Executive Summary

FuturEdge proposes a strategic opportunity for Port Waratah Coal Services to strengthen their action in alignment with the Leaner, Cleaner, Greener global megatrend, to optimise their reputation with the community and ensure longer term sustainability as a business. The proposal centres on the introduction of a circular economy culture within the organisation and FuturEdge have developed a Waste Management Cycle model that will enable all facets of material life cycle to be effectively considered.

The sustainable disposal of steel cord conveyor belt has posed a particular issue for PWCS that until today has remained unsolved. FuturEdge proposes the development of a partnership with Tyre Cycle, a recycling business that has created a solution for this particular type of conveyor belt. Tyre Cycle is proposing to set up a recycling facility in the Hunter Region and FuturEdge believes this is an opportunity for PWCS to capitalise on the creation of carbon credits that would enable the achievement of the business's net zero targets.

The Waste Management Cycle model that FuturEdge has developed incorporates the following elements:

1. Planning and Design - the most effective way to prevent waste is to ensure the products and processes are designed to be as efficient as possible and minimise the opportunity for waste creation.
2. Product Selection - the longevity of materials and ability to recycle are considerations when selecting the most appropriate products and materials.
3. Education and Culture - the key to making the process sustainable.
4. Maintenance - optimal management of equipment and machinery to ensure viable waste product suitable for recycling.
5. Commitment - previously difficult to gain, commitment to recycling is critical to ensure ongoing viability of recycling facilities.
6. Recycling / Sustainable Disposal - creation of a solution for recycling of waste material.

While at the present time, disposal of conveyor belt is still a potential option for businesses like PWCS, similar to WA, at some stage it will be legislated against in NSW. This report presents a viable partnership option for PWCS to partner with Tyre Cycle to create a recycling solution for PWCS as well as other Hunter based mines and businesses. The creation of carbon credits makes this a viable long term solution that will assist the PWCS to achieve its net zero targets and continue to build on its reputation with the community and ensure an ongoing Licence to Operate. The Waste Management Cycle model that FuturEdge has developed will be applicable to other products and equipment that results in waste, enable continuous improvement for PWCS in implementing a circular economy culture.



# FuturEdge Overview

FuturEdge is a dynamic and forward-thinking group of like-minded individuals who are deeply committed to shaping a sustainable future for the Hunter Region. Our collective passion for strategic planning and sustainable development unites us in a common goal: to propel Australia towards becoming a resilient and thriving nation.

At the core of our group's strength lies the diversity of our members' backgrounds. With representation from various sectors such as defence, higher education, manufacturing and heavy industry, and commercial banking, our multidisciplinary team brings a wealth of knowledge to the table. This diversity enables us to approach challenges from multiple angles, fostering innovative solutions that encompass a wide spectrum of perspectives.

Our organisation is focused on in-depth research into the seven global megatrends identified by the CSIRO, which serve as signposts to the future. These megatrends – encompassing areas like technological advancements, demographic shifts, resource scarcity, and climate change – are critical factors that will shape Australia's trajectory in the coming decades. Through study and analysis, we've gained insights into how these megatrends interplay and how they are poised to reshape the economic, social, and environmental landscape.

## Our Team



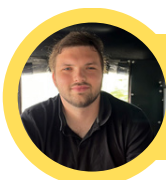
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# The FuturEdge Vision, Mission & Values



## Vision

The Hunter Region equipped for a sustainable future, enabled to meet the challenges of current and emerging global megatrends.

## Mission

To support Hunter based businesses to identify and act on key global megatrends to optimise organisational sustainability.

## Values

**Innovation** - innovation is crucial to the continuing success of any organisation.

**Excellence** - the quality of being outstanding drives successful outcomes for business.

**Collaboration** - working together with a shared goal for a more sustainable future.

## Value Proposition

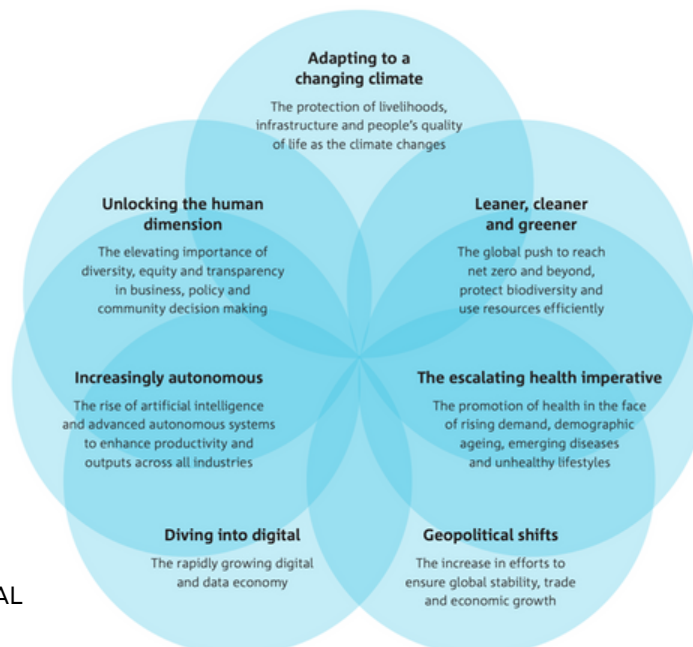
Our specialist consulting organisation supports a diverse range of Hunter businesses who want to ensure their sustainability and viability by aligning their strategy with key global megatrends and understanding how these can shape the future of their operations.

# The CSIRO Global Megatrends



The seven global megatrends identified by the CSIRO are the key to creating a sustainable business in the modern world. They can be viewed in two distinct ways: as the major challenges that will shape our lives in the coming decades, or the opportunities Australian businesses can plan for and address now to build a robust and resilient company. A company is only set to gain by addressing these megatrends before they become a major challenge, as “just in case” is far better than “just in time”.

While this report will focus on addressing a single key megatrend, the trends are intertwined at their roots and by addressing one, a company is certain to be in better stead for the others. The seven megatrends are ‘Adapting to a Changing Climate’, ‘the Escalating Health Imperative’, ‘Unlocking the Human Dimension’, ‘Increasingly Autonomous’, ‘Diving into Digital’, ‘Geopolitical Shifts’, and the focus of this report ‘Leaner, Cleaner, and Greener’.





# Leaner, Cleaner, Greener

Leaner, Cleaner, and Greener is not new to global organisations, with many companies taking a more climate focused approach to business in recent decades. The key change around this megatrend is the push by the general public and the government to focus more effectively on the future of the environment for generations to come.

Climate change has become a central issue in recent years and both the government and the public have high expectations on businesses for how they optimise environmental sustainability. This has resulted in businesses being required to reduce emissions, a loss of acceptance of sending spent equipment to landfill and; consequently, the need to reuse or recycle waste and byproducts previously considered garbage.

## A Circular Economy

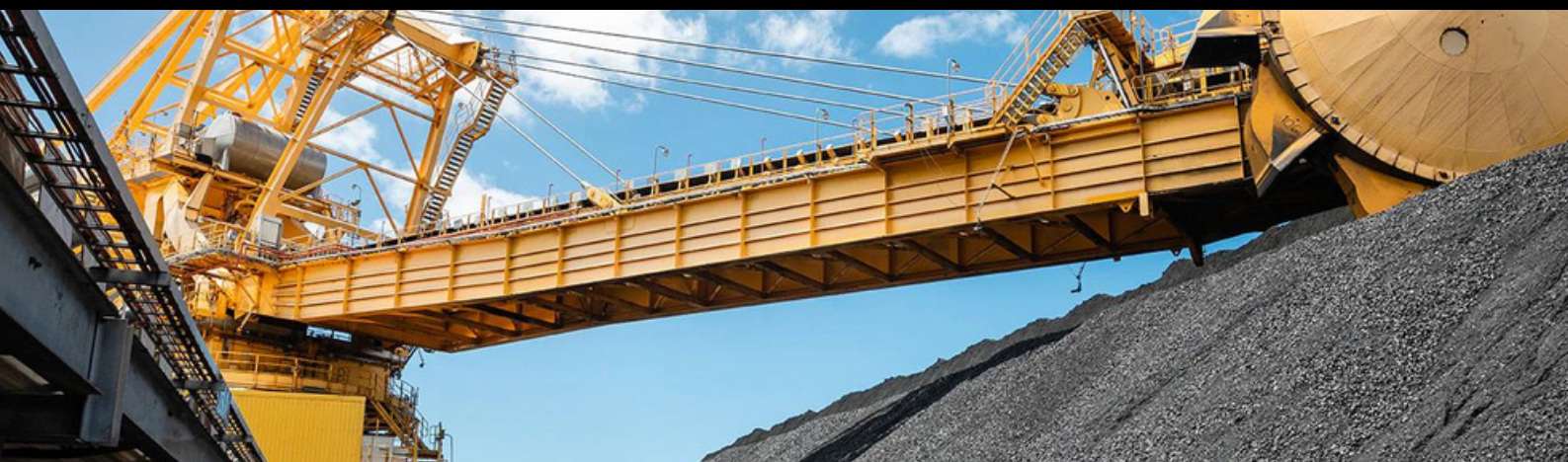


**Diagram of the operation of the circular economy:**  
Source European Union 2015

The concept of a circular economy revolves around minimising resource consumption, waste generation, and environmental impact by promoting the continuous reuse, repair, and recycling of materials.

In the context of the Hunter Valley, a transition towards a circular economy presents both challenges and opportunities. Transitioning from a linear to a circular economy requires cooperation between industries, government agencies, and local communities, and would need to address economic dependencies and social implications tied to the coal sector.

# Port Waratah Coal Services



FuturEdge views Port Waratah Coal Services as an organisation which stands to benefit greatly from addressing these megatrends and has approached the business due to a number of key criteria:

1. Level of engagement to work towards addressing the megatrends;
2. Access to information within the organisation to support research and innovation;
3. Opportunities to apply strategic recommendations and action plan.

Through FuturEdge's research and engagement with PWCS, it is evident that the company has a future focused mindset in place. Their vision and purpose is defined by five driving principles. These are 'Health and Safety', 'Licence to Operate', 'Effective Organisation', 'Operational Delivery', and 'Coal Chain'.

Aligned to the Licence to Operate driver, a key focus on the Leaner, Cleaner, Greener megatrend can be observed. It is evident that investigation is ongoing into the company becoming more environmentally friendly, with a plan to reduce their electrical draw from the grid by 50% by 2030. FuturEdge views this as a perfect opportunity for PWCS align directly with this megatrend and become a sustainable industry leader in the Leaner, Cleaner, Greener space.



# Strategic Proposal



FuturEdge proposes that Port Waratah Coal Services pursues a focus on the evolution of a circular economy. This would require the business to identify elements of material input, usage statistics and creation of waste, and develop more sustainable solutions at each point in the life cycle of these products.

In particular, a key problem for PWCS is what to do with used steel cord conveyor belt, a product that is currently stored on site post use once it is removed from operation. There is currently no local solution to how to sustainably re-use or recycle this steel cord belt and this report proposes an agreement be formed with an organisation who are planning the development of a local facility to manage the recycling of the material.

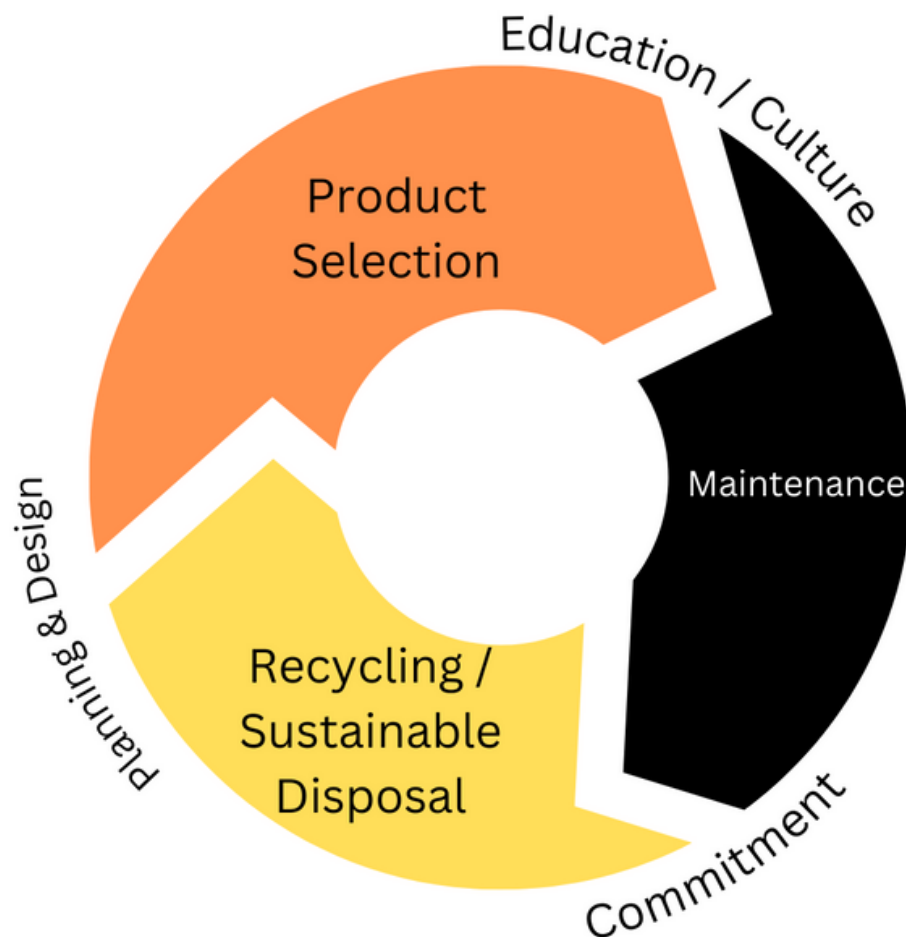
In recent years additional technology has become available but has lagged in becoming adopted or utilised. We aim to use these examples to assist in the demonstration and adoption of how the way of thinking and acting leaner clean greener in day-to-day operations can have significant impact for the environment/business and that one does not need to be sacrificed to benefit the other.

Currently, there is no legislation in NSW to prevent the disposal of conveyor belt waste. However Western Australia has already legislated against disposal and businesses that produce conveyor belt waste have had to identify recycling or re-use options. FuturEdge acknowledges that this will become a critical issue for PWCS who currently stores waste conveyor material onsite which will become unable to be recycled if it is stored for too long. FuturEdge proposes that PWCS become an industry innovator in recycling rather than wait for legislation to mandate recycling.

Tyre Cycle is a business that has developed a recycling option for steel cord conveyor belt. It is proposed that a partnership with this business to establish a Hunter based facility.

This report will outline an overarching circular economy based waste life cycle strategy. There are also a number of key actions that PWCS can take to establish a partnership with Tyre Cycle and other Hunter-based businesses; seek grant funding for the building and running of a conveyor belt recycling facility; and obtain carbon credits to move the business closer to achieving its goal of moving towards net zero.

# Waste Management Cycle



The above diagram is a graphical representation of the core elements of a circular economy that FuturEdge proposes to be critical in establishing an effective culture at Port Waratah Coal Services. Each element requires focused effort to ensure the entire product and material life cycle is considered.

PWCS already has strong Maintenance practices across the site. There is already significant automation that enables the plant to be managed proactively, and with regard to conveyor belt, this means change out of material at optimal times to ensure usable waste product remains, as well as ensuring minimal damage and disruption to plant.

The next section of the report outlines in detail how PWCS could apply this strategy to improve the circular economy culture of the organisation with particular focus on the life cycle of steel cord conveyor material onsite.

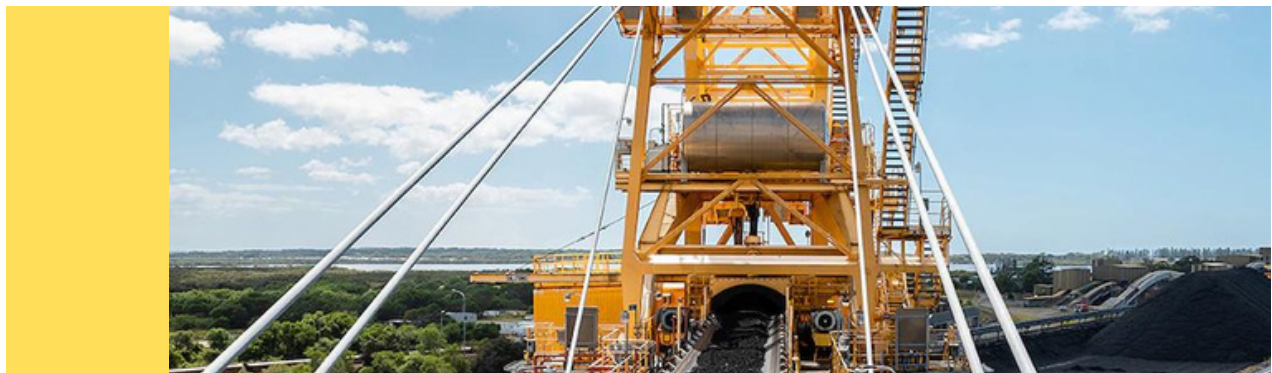


## Planning and Design

When considering the waste management cycle and the concept of a circular economy, the principle often commences at the Planning and Design stage of a product or material's life. It is crucial that adequate planning occurs to ensure the product or material is fit for purpose. Related to the Leaner, Cleaner, Greener megatrend, it is also important that there is consideration of the environmental consequences of the use or application of the product or material.

### Segment Actions:

- Foster a management and engineering culture of environmental awareness and sustainability.
- Provide ongoing education and training for employees on the environmental and economic implications of product choices.



## Product Selection

With regard to product selection, particular considerations could include:

- What the product or material is made of and whether already recycled materials could be utilised;
- How long the product or material is intended to be used and whether there are options with greater longevity before replacement, recycling or disposal are required; and
- Where products and materials are sourced from with an emphasis on local sourcing to reduce transportation costs and ensure manufacturing best practice.

The production of industrial conveyor belts consumes significant energy and resources, leading to a substantial carbon footprint. The disposal of used rubber conveyor belts also contributes significantly to environmental challenges. FuturEdge emphasises the opportunity for PWCS to diminish their environmental impact through conscious product selection.

## Product Selection Cont.

Considering material composition at the design stage can even eliminate harmful chemicals or product in the first place. We have seen this time and time again throughout industry (Asbestos for example has been all but eliminated from the industry in exchange for less harmful alternatives). More than 70% of conveyor belt material comprises rubber, with synthetic rubber being the dominant choice for its versatility. This material composition results in the production of non-biodegradable waste with challenges in breaking these materials apart.



Raw materials used in conveyor belts, such as polyester/nylon fabrics and synthetic rubber components, are primarily derived from crude oil, with conveyor belts containing approximately 45% oil. The Steel in steel cord belts can make pulling the product apart into its raw components challenging.

Geopolitical considerations also need to be factored into decision making at this point in the life cycle to optimise security of the supply chain, ensure best quality product is sourced, and to prioritise the local sourcing of materials to support the sustainability of the Australian economy.

### Segment Actions:

- Increase the life of a belt through correct belt selection.
- Reduce the carbon footprint associated through extend life.
- Decrease the environmental impact of conveyor belt disposal through responsible choices (i.e. easily recycled material selection, eco-friendly materials)

## Education & Culture

A major part of stepping a company into addressing one of the seven CSIRO megatrends is the culture within the business. Effective education and training are fundamental to instilling a sustainability mindset across all levels of the organisation. Investigation has shown that PWCS can demonstrate that the employees - management, designers, and maintainers - are very open to embracing change to make the company more sustainable.

Future action will require focus to build upon this established baseline to equip employees with the knowledge and tools needed to make environmentally responsible decisions.

FuturEdge suggests the introduction of incentives to motivate employees to actively engage in sustainability initiatives, with the establishment of an internal recognition and reward program.



The introduction of Key Performance Indicators (KPIs) - Measuring the success of the education and culture chapter requires defining relevant KPIs. The incorporation of leaner cleaner greener into every employee's KPIs demonstrates the importance of this for the business further driving adoption.

### Segment Actions:

- Foster a culture of environmental awareness and sustainability throughout the organisation.
- Provide ongoing education and training for employees on the environmental and economic implications of product choices.
- Implement an internal sustainability certification or recognition program to reward and recognise employees and teams that actively contribute to sustainability initiatives and demonstrate a commitment to a leaner, cleaner, and greener approach.



## Maintenance

This area has become a corner stone of the industry and many companies including PWCS demonstrate their expertise in this area. FuturEdge has not focused significantly on this area for this report due to the strong expertise of PWCS in this area and its' Asset Management Policy. Through our research PWCS has demonstrated this is not an area of challenge for the organisation and instead the focus will be on optimisation rather than major change.

### Segment Actions:

- Continue to evolve the organisation's comprehensive maintenance program to extend the lifespan of conveyor belts.
- Reduce the percentage of conveyor belts prematurely scrapped due to damage.



## Commitment

Inconsistent commitment from industry to recyclers was highlighted throughout the research conducted on this project. A strong commitment through industry partnerships, with recyclers and with government has been highlighted as a key requirement for any recycling of industrial products.

### Segment Actions:

- Increase Recycling Rate: Target the recycling of steel cord belts setting benchmarks for recycling targets per annum.
- Establish Recycling Partnerships: Strive to establish partnerships with recycling companies or organisations specialising in conveyor belt recycling to streamline the recycling process and improve efficiency.
- Repurpose Belts: Ensure fabric belts sent for repurposing are being done through best practice and preferred recyclers.
- Capitalise recycling to offset carbon emissions.
- Encourage the recycling of belts by PWCS customers and offer incentives.
- Track and Report Progress: Implement a tracking and reporting system to monitor the progress of recycling efforts and regularly report on recycling achievements and improvements.

## Recycling / Sustainable Disposal

This section poses significant challenges and will form a key part of the findings of our report. As the report will show, recycling is a difficult issue that cannot be solved by one company alone, but can be solved through partnerships, government support, industry initiatives and most importantly relationships, commitment and trust.

Recycling Challenges - Recycling conveyor belts is a complex, slow, and expensive process, with an average recycling rate of less than 10%. Challenges are posed by components like polyester and nylon fabric inner plies, as well as metal cables in steel cord belts. Through partnerships, used belts can be repurposed in various applications, significantly extending their lifespan. Steel cord belts pose unique disposal challenges and have historically been disposed of by the industry.



### Segment Actions:

- Increase the recycling rate of used conveyor belts to reduce waste.
- Establish partnerships with recyclers to repurpose and recycle conveyor belts effectively.
- Establish methods of utilising government grants and carbon credit to gain momentum and tackle this difficult challenges.
- Once a solution is established utilise PWCS placement in the supply chain to offer the solution to PWCS customers through assistance in disposing of used belts and sharing carbon credits.
- Capitalise on PWCS unique position on the rail network with accessibility to a large number of Hunter-based coal mines and large industrial businesses.

The remainder of the report will outline in detail how a partnership could be developed that meets each of the goals outlined above, creating a solution for PWCS, but also their customers and other Hunter-based businesses.

## Strategic Partnership Model

It is recommended that PWCS form a partnership with Tyre Cycle to hold a stake in the process. Given the need in the Hunter Valley for an appropriate process for the successful recycling of conveyor belts as a priority, if done successful this partnership can be both profitable and achieve the goals of a circular economy and the world view to net zero.

A partnership structure is a relatively inexpensive and easy process to initiate which will allow PWCS and Tyre Cycle to share the control and management of the business. Given Tyre Cycle would be new to the Hunter Valley this would be an advantage to utilise PWCS' years of knowledge and experience in the local area. It allows for the pooling of resources and expertise by Tyre Cycle, resulting in greater efficiency and innovation. By sharing knowledge and technology, PWCS and Tyre Cycle can leverage each other's strengths to tackle challenges with conveyor belt recycling and work to develop new opportunities.



In addition to innovation, the direct access to Hunter Valley coal customers of PWCS allows for an increased presence and opportunity for Tyre Cycle and PWCS to expand their current services. We would suggest once the structure is implemented a service can be created to provide conveyor belt recycling as part of their current service. This would be beneficial and expand the reach of both companies and increasing their revenue potential.

On investigation, each mine site approached as part of the research, does not currently have a documented or consistent approach to the disposal of conveyor belts. Currently multiple different companies in the valley are engaged and based on what is known, is that it is disposed of by way of land fill. With the increased focus in the valley of net zero targets and also a conscious community focus on waste reduction, being able to provide a viable service to the existing mine site customer would boost the viability of the solution if successful.



## Government Grants

It is an important stage in this process is that the partnership would look to utilise the use of government grants to further support this approach. Both the Australian and State governments have shown, through the release of multiple grant schemes, that recycling and initiative approach to waste management are at the forefront of their future plans.

Tyre Cycle currently have been successful in this process being awarded over approximately \$5million in government funding to date, to support their efforts for waste reduction.

Only recently the New South Wales government released their strategy titled Water and Sustainable Materials Strategy 2041: Stage 1 – 2021-2027 with the main mission statement being:

*New South Wales is transitioning to a circular economy over the next 20 years. This means we will end up with less waste, less emissions, less harm to our environment and more jobs.*



\$13 million of the funding available under this strategy will be targeted towards investment in new technologies and uses for recycled material. This staged approach will take affect over the next 20 years with the first stage outlined over the next 6 years. Although at the time of this paper, current government grants are closed for applications, it is expected additional grants will be released under this strategy. In recent times, the government has released the following applicable grants for recycling in Australia that were available in the past:

1. Waste Less, Recycle More: The New South Wales government launched the "Waste Less, Recycle More" initiative, which included various grant programs to support waste and recycling projects. These grants aimed to reduce waste to landfill and increase recycling rates in the state.
2. Cooperative Research Centres Projects (CRC-P) – The Federal Government announced \$10million of funding for waste recycling industry to provide innovative solutions for recycling and reuse of plastics, papers, glass and tyres.

## Tyre Stewardship Fund

Additionally, the Tyre Stewardship Fund is a government led voluntary scheme to promote the development and viable markets for tyre-derived products. It is also the recipient of successful grant applications from the Federal Government to support this purpose. The purpose of the fund is to facilitate investment and support Australia's tyre recycling industry and markets for tyre deprived products.

Given the close link and access to knowledge this fund has, it is suggested that partnership would form part of this fund. The fund rests on helping commercial organisations reach a point where they can independently supply large and stable markets with competitive products that contain tyre derived materials.

Local companies already part of this scheme include Beurepair, Bridgestone and Tyrepower.



## Next Steps

In Australia, partnerships looking to apply for government grants can navigate the process by adhering to specific guidelines and procedures set forth by various government agencies. The first step is typically to identify the relevant grant program that aligns with the partnership's objectives and activities. Thorough research is crucial to understand the eligibility criteria, application deadlines, and the specific documentation required.

Throughout the application process, partnerships must also stay informed about any updates or changes to the grant program's guidelines, and they should maintain open lines of communication with the relevant government department or agency. Demonstrating how the partnership aligns with government priorities and the potential positive impact on the local community can significantly enhance the likelihood of securing government grants in Australia.

# Carbon Credit Analysis

In 2022 PWCS developed their first climate action plan to be implemented from 2023 to 2030 contributing to Australia's Paris Climate Accord commitments. This plan identified reducing scope 1 and scope 2 emissions by 50% by 2030 compared to a 2018 baseline year.

The 2018 baseline had scope 1 emissions at 362.1 t CO<sub>2</sub> -e and scope 2 (market based) emissions 124,085 t CO<sub>2</sub> -e with key actions identified with FutureEdge specifically focusing on the scope, prioritise and deliver efficiency projects from 2023-2030.

Currently PWCS has 150 rolls of conveyor belts totalling 45,000m and 2,250 tonnes. Of this 60% is available to be reused with the remaining 40% available for recycling. The current process for PWCS for this product is to store and dispose of in landfill. FutureEdge has identified an industry partner that is setting up a facility in the area and would be looking to partner with PWCS in the full recycling of the product.

This partnership would lead to a reduction in landfill, a sustainable solution to recycling of product, a movement to influence and create impact and a shift to reducing emissions targets in line with the climate action plan.

FutureEdge have identified through the processing of the belt a calculation to develop a carbon credit scheme to offset current emissions.

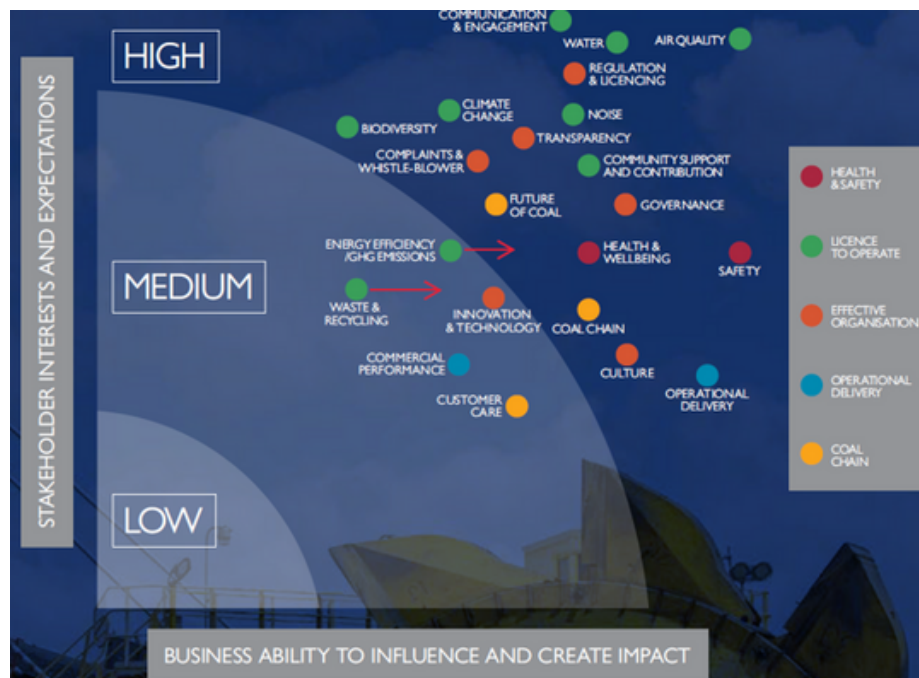
	Current KGs	% of Recyclable Product	Sub Total	Landfill CO2 (grams per 1kg)	KGs	Carbon Credits
<b>Current</b>	2,250,000	95%	2,137,500	70%	1,496,250	1,496
<b>Future</b>	350,000	95%	332,500	70%	232,750	233



## Carbon Credit Analysis Cont.

The process for the calculation is taking the current conveyor belt on site and the future yearly recyclable amounts to produce carbon credits through sustainable recycling. The carbon credit will be registered and recorded allowing PWCS to move towards its sustainability goals. The above target would remove the total scope 1 emissions and look to offset a small portion of scope 2 emissions.

We believe this partnership can also be achieved through engaging Environment for NSW grants such as the remanufacture NSW grant which funds opportunities to support the NSW resource recovery response and allowed for \$50,000 to \$1m for trials and \$100,000 to \$3m for infrastructure.



While initially imposing a cost on PWCS to recycle the stock of conveyor belt currently stored on site, FuturEdge proposes that the benefit of the available carbon credits and the community reputational factors as a leader in the recycling of waste material rather than disposal will ensure a more viable Licence to Operate in line with the organisation's values.

PWCS is in a prime position to capitalise on this opportunity as the business already has sophisticated automation and data tracking as part of its maintenance processes on site. The inclusion of the introduction of a circular economy culture into the way the business operates would optimise the management of assets into the future.

## Benefits of Implementation

The introduction of a circular economy culture at Port Waratah Coal Services would have significant benefits, not only for the organisation, but for the Hunter Region's ongoing sustainability.

The effective management of waste onsite with regard to steel cord conveyor belts has posed a previously unsolvable problem. FuturEdge's proposal to partner with Tyre Cycle not only will solve this problem, but provides the opportunity to capitalise on recycling material for other businesses within the Region, as well as being able to utilise carbon credits against their net zero targets as a business.

This report has detailed a range of actions that can be taken in the short and longer term to support the introduction of the recycling facility, but also creating an organisational culture that will ensure ongoing viability in alignment with the Licence to Operate value of the business.

Addressing these issues in line with the Leaner, Cleaner, Greener megatrend will also ensure that Port Waratah Coal Services is able to continue to build on its' reputation with the community, which has a vested interest in continuous improvement of environmental initiatives.



The Waste Management Cycle designed by FuturEdge is applicable to any product within Port Waratah Coal Services' operations and makes the solution beneficial in the short term but also applicable to longer term applications.

There is also an additional opportunity to optimise Tyre Cycle's recycle rate and further improve profit margins of the proposed partnership. RubberGem, a conveyor recycling plant based in Western Australia, has invested in technology that has resulted in a 98% recovery rate which is optimal for the industry. This would further improve viability of the solution. As a longer term solution, RubberGem may also open a local facility which would create another opportunity for PWCS to partner with a successful recycler.

PWCS is already a profitable business, and by implementing FuturEdge's proposal will have a real opportunity to capitalise on taking a Leaner, Cleaner, Greener approach to how it operates. This will only build on the strategy already in place to continue to improve in this space and will ensure the culture of the business makes the solution sustainable for the foreseeable future of the organisation.

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## Appendix 1 - PWCS Asset Management Policy



### Asset Management Policy

*Port Waratah Coal Services is committed to managing its assets over their whole of life to deliver the services our customers expect, and we care for our assets so that we can offer a reliable service on an ongoing basis at the lowest sustainable coal handling charge.*

*Our vision as a coal handling facility is to be an agile, efficient, sustainable organisation, able to operate at its best in any market condition, within an aligned and functioning coal chain.*

#### **Port Waratah is committed to:**

- Our values and our Five Drivers for Success, which includes the Operational Delivery framework.
- Managing our assets in accordance with our asset management strategies, framework and plans with teams adopting an integrated approach across strategic, tactical and operational asset management.
- Strategically managing the life of our assets consistent with our long-term commercial requirements in a way that maximises asset service delivery, manages risk and considers whole of life costs.
- Delivering business performance and reliability, ensuring assets are cared for and perform in accordance with their intended function when we require them to.
- Achieving best value for the Business through our asset decision making processes and long-term planning to have oversight of higher cost activities to maintain a sustainable coal handling charge.
- Applying robust change management principles and ensuring that work is managed through disciplined work management processes.
- Completing work in a manner that meets the relevant legislative requirements and commitments to Health, Safety the Environment and Community.
- Fostering a culture where people feel ownership for our assets and empowered to continually improve the reliability and performance of our assets to support the Operational Delivery framework.

We expect leaders to provide leadership and to consult with and engage team members in understanding and implementing the requirements of this Policy.

**HENNIE DU PLOOY**  
CHIEF EXECUTIVE OFFICER

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Asset Management Policy

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19 August 2022

Authorised by: CEO