ENVIRONMENTAL IMPACT & SUSTAINABILITY REPORT 2024

INTRODUCTION

This is our second **Sustainability Report** reviewing our work to date in climate action and sustainability. It's objective is to inspire change and challenge perspectives, as well as being an open and honest appraisal of how we stack up against our own commitments and targets, sharing what we are learning along the way. We reflect back on data from the 2022-2023 season to see how we are progressing season-on-season.

Munster's culture is people-first, community-centric and action-focussed. This runs deep. Our values of community, ambition, integrity and passion are the fabric of the club. They always matter. This is who we are and how we go about nurturing and promoting the sport of rugby, including our next chapter in the context of concerning global challenges.

Our journey to date has involved a steep and continuous learning curve. We're learning that we can understand it and communicate better if we put climate science into our own language; that it affects us too; that action is necessary, urgent and possible; that there are activities we're already doing as part of our work that contribute to the global goals already; that change is hard but part of the journey. We're valuing our relationships and collaboration more than ever, embracing complexity, and daring to dream bigger as we veer away from business-as-usual.

We have noticed first-hand that our weather is getting unpredictable. Stronger storms battering our counties, heavier rainfall events, wetter winters that seem to endlessly drag on, and temperatures fluctuating up and down.

Tackling the climate and nature crisis? There's no doubt, we're up against it, backs to the wall. But facing adversity has always brought out that real resilience that runs deep at Munster. It is founded on perspective, purpose, meaning, joy and connection. That close connection we share when we compete together, when we support together, when we turn up together.

What really matters in rugby, goes beyond winning matches and trophies. It's about character. We are constantly reminded by the uncertainty and inequality around us in the world today, that we are part of a much bigger game, and that what really matters on and off the pitch is **how we show up.**

Thank you for reading our report.
We hope you will share our journey to create ripples outward
inspiring others and in turn inspiring us to keep moving forward.

OUR VALUES

COMMUNITY

Promote an inclusive and diverse community where we are united by our heritage and traditions that shape our future.

Value collaborative relationships, promote engagement and effective communication.

AMBITION

Be the standard bearer for excellence and innovation.

Learn from experience - Improve - Achieve.

Strive to be the best version of yourself and what you want the club to be.

INTEGRITY

Be honest and respectful in our actions, treating others how you wish to be treated.

Seek out and understand others' opinions.

Show humility and accountability.

PASSION

Inspire and be inspired by others.

Celebrate and take pride in belonging to something special.

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When we are sick and have a temperature, we don't function very well.
We can't play rugby, we can't work properly, we want to curl up in a ball until we get better.

Planet Earth, our home, is sick too.

We have a temperature that is 1.3°C degrees above normal and rising. There's no magic medicine to reduce this temperature. The only option is to shed the puffer jacket of carbon pollution that is heating up our atmosphere. Our planetary systems, which provide the critical life-support conditions for us and all other biodiversity to live, are starting to malfunction.

This is a game of fine margins, with dramatically different outcomes.
It's a knock-out and there's already 80 minutes on the clock.

Munster happens to have some experience with last-minute miracles.
Our club history is layered with stories of pulling ourselves back from the brink and achieving feats which appear insurmountable against all the odds.

It takes hard work, an unrivalled collective passion, and incredible teamwork, but it all starts with one thing above everything else...

BELIEVING THAT IT IS POSSIBLE

TAKING ON THE CHALLENGE

ATTACK

...the emissions

Get them down to near zero. This means phasing out fossil fuels, keeping them in the ground where they belong, and finding alternative solutions instead. Every person, community, business, and government must play their part to reduce emissions. These cumulative actions contribute globally. This is known as 'Climate Mitigation'.

& DEFEND

...against the impacts

This is adapting to the impacts of a changing climate from human-caused emissions already in the atmosphere. Actions which strengthen our resilience, our capacity to adapt to stress and change. It means preparing for the onslaught of extreme weather often by investing in local solutions and disaster preparedness. This is known as 'Climate Adaptation'.

THE CLIMATE GAMEPLAN

Putting such a complex global challenge into our own language helps us to understand it better.
It makes it relatable. It connects it to what is important to us. It moves our awareness more quickly into action and can bring everyone on board to contribute in a meaningful way that makes sense.

Rugby itself is multi-faceted. The Laws of Rugby can be a bit complicated at times.
That doesn't mean that everyone can't play rugby. Rugby is for everyone. We are all capable of learning and giving it a go. In the same way, we are all capable of learning and contributing positively to global challenges which affect our lives too. Change is hard and we often don't like the sound of it; but we do it, throughout our lives and every day. When we understand it better, when we realise we're not on our own and the person next to us has our back and cares too, it doesn't feel so daunting anymore.

Like the game of rugby, Climate Action has two main parts:

Climate Mitigation - attacking the emissions, getting them down to net (near) zero. It works on a global scale, where everyone contributes and has a part to play.

Climate Adaptation - defending against the impacts of climate change. It works on a local scale, where people must adapt to the worsening extreme weather specific to where they live.

The more we attack by reducing the emissions (mitigation),
the less defending we will have to do (adaptation)

As we know, defending is more tiring than attacking.
It wears us down and eventually our defensive line can break.
Climate change will do the same.
It is not enough to only defend, we must attack and get scores on the board to win the game.

Offence is our best defence

MUNSTER'S APPROACH: MAXIMISE OUR IMPACT

We can't take on all the global challenges on our own shoulders.

There's just too much, it's too big. Rugby is what we do, how we move through and connect to the world. We must focus on our strengths, on the high-impact areas where we can make our most effective contribution aligned with who we are, our abilities and our role in society.

Leading by Example: Focusing on our own performance on and off the pitch

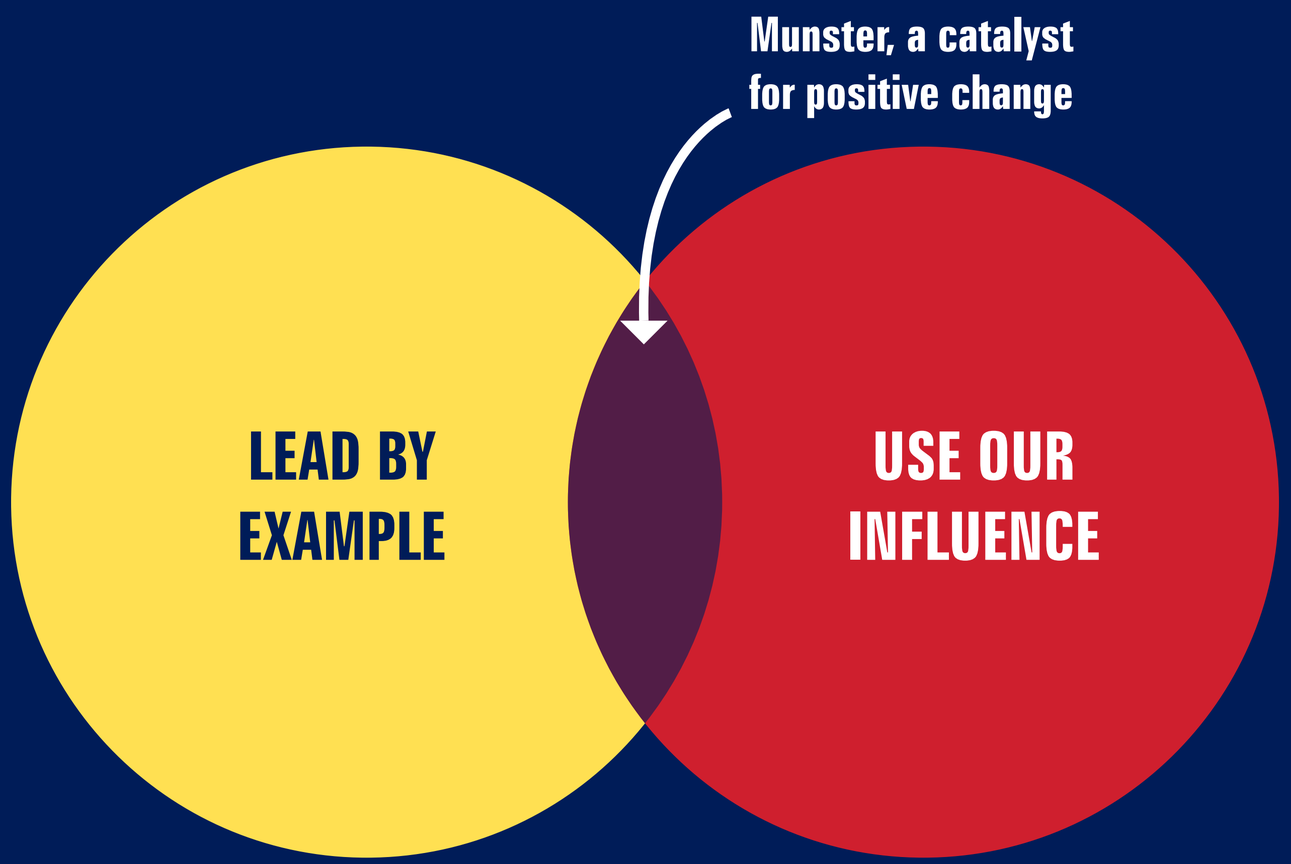
This means walking the walk with our own operational footprint, keeping our 'own house in order'.

What we can control. Reducing greenhouse gas emissions for which we are responsible and other environmental impacts like waste. Tracking our performance against targets and sharing this with others. It also means adapting our rugby activities and facilities for our changing weather patterns.

We don't expect people to follow us if we are not willing to put in the work ourselves. When we take action, we can break down barriers along the way. This can trailblaze a path, making it easier for others to take action too.

Then we can be more effective and authentic in sharing actions, plans and challenges to inspire and encourage others on the journey - setting others up for the win.

No doubt a few balls will be knocked-on enroute to a sustainable future, we won't always be perfect, but we're taking it on, we're off the mark, and we're making real gains already. We're not afraid to admit, we're a competitive bunch. We want Munster to be the best at everything we do.



We can become a catalyst for the right kind of change in our local communities, in Irish society and in rugby globally.

To do this, as we attack and defend to implement our climate gameplan, we will:
1) lead by example, and
2) use our influence

Using our Influence: Raise awareness and transform awareness into action

This means reaching far beyond what we can directly control, to who we can influence.

Munster can connect the issues and solutions to our rugby and to what really matters to our communities. It means making global issues more relatable and more local for our audiences, using the language of rugby and the stories of our own experiences. Not everyone engages with climate change in the same way though. We know we must get creative with how we communicate and include the things that matter to the diverse range of people who follow us - leave no one behind.

Munster sits at an unusual intersection within our society and economy and we understand the different roles we have as a sport organisation - as an influencer, a role model, a host, an advocate, a community, and as an emitter too. We can use our unique voice and platform to reach a wide range of people, businesses and organisations.

If we use our influence in the best way, we know we can mobilise communities, leverage rivalry and competition to raise ambition, affect real social change, and unleash our players as role models. We can attract sustainable partners that will help us on our journey and strengthen our financial position. By collaborating broadly, we can bring about positive changes we perhaps couldn't even imagine all on our own, and help to bring about a social transformation which ripples outward to tackle global challenges.

First, we believe in what's possible.
Next, we help others believe it too, leading by example.
Then, collectively, we make it happen.

OUR RIPPLES CARRY OUTWARD... THROUGH OUR SPHERES OF INFLUENCE

Mapping out who we can reach, has shown us how far we can influence.

Influence is sport's superpower and the way it can make its greatest contribution to climate action and sustainability. Sport has the cultural power to unite people unlike anything else can in society, and drive the collective action we need.

Munster recognises this. We are a well-known global rugby brand. Our voice and actions carry, across the rugby world, across communities in Ireland and globally through the media. Our diaspora live all over the world in many countries. We have relationships and bonds that connect us. Many of our staff and players are truly global citizens with many countries represented. We have a strong history of global connection and attract international touring teams. We play across Europe and as far away as South Africa.

We live in an interconnected world and we are an integral part of that system, which means we also have the power to change that system. We have a platform from which we can shape our unique contribution to global challenges.

This all starts with us, with our staff, players and supporters, within our local communities at home. When we lead by example, our actions radiate outward. This is how social norms are changed, how political will shifts, how systems transform.

This is how we change the world, and take on the greatest of challenges, from our little corner of Ireland.

GLOBAL REACH

THE RUGBY FAMILY

World Rugby, IRFU, other governing bodies, other rugby clubs - professional and grassroots, rugby supporters all around the world.

Our players also represent Ireland in international competition all over the world like in World Cups, and influence other players by sharing their experiences at Munster.

IRISH DIASPORA

Irish people are everywhere, and know Munster well. We can reach our Irish diaspora all over the world who keep an eye on what happens back home, and influence those around them in other countries.

FRAMEWORKS & NETWORKS

Through UN Sports for Climate Action framework, UN Global Compact participants, and Sport Positive Summit networking events, we share ideas, promote Munster's actions, and upskill on the latest in the world of sport sustainability.

WIDER SOCIETY

GOVERNMENT DEPARTMENTS

We will continue to work together with various Departments in Sport, Transport, Environment, Climate and Communications to develop and implement policy change, campaigns and financial supports which benefit our local communites through sport.

MEDIA

We have the attention of mainstream TV and newspapers, social media, podcasts, and local media outlets. We can encourage the media to shift the narrative on climate action and social change, and amplify the influential role that sport can play.

POLITICIANS

Politicians follow sport too, and we have good relationships with our TDs (members of parliament). We can use our influence to shift political will and work constructively towards positive societal change in Ireland.

IRISH PUBLIC

Rugby has a unique hold on the Irish psyche, like never before. We can reach into homes and businesses all around the country. We can inspire people, dare to dream, to believe in what's possible.

OTHER SPORTS

We network and work with other sporting entities - GAA, football and others. Our players connect with other players and athletes. We're all in this together - sport stands in solidarity, tackling climate change, social inequality and discrimination of any kind. Connecting individuals and communities, driving for an inclusive and cohesive society.

COMMUNITY

Our communities are the beating heart of Munster. We work in over 180 National Schools, 111 Secondary Schools, and 67 clubs and communities throughout the province. We have built relationships with councils, transport operators, Gardaí, universities, other sport organisations, community groups and charities.

Munster can contribute to changes we need across our province; helping to increase footfall in our cities, partnering with local businesses and suppliers, calling for better transport options and infrastructure for sport, raising awareness on climate, nature and inequality issues, and developing safe and climate-resilient facilities for sport, recreation and wellness for our communities.

Sport has a role in helping our communities transform and adapt, to learn and grow.

CLUBS

67 rugby clubs

SCHOOLS

Primary, secondary and special schools across the province

3 CITIES

Cork Limerick and Waterford

6 COUNTIES

Clare, Cork, Kerry, Limerick, Tipperary and Waterford

ECONOMY

PRIVATE SECTOR

From energy to sportswear, food to transport, technology to health, finance to logistics, we can reach many sectors of the Irish and global economy. Our commercial partners, our local suppliers, sponsors and patrons. They are a crucial part of our long term financial sustainability along with our ability to bring positive social impact and environmental protection to communities. We can partner with those companies actively making a difference to bring projects to communities and amplify the positive actions of others by using our combined platforms to make a difference to our economy and our society.

SUPPORTERS

Our supporters are an integral part of the club.We can influence them and they us. By our leadership, staff and players setting an example to follow and co-designing campaigns and solutions with supporters, we can help funnel their passion towards positive actions, not just on matchday, but every day.

Already the best supporters in the world, we know they are capable of becoming trailblazers for others to follow, carving out a positive future through climate and nature actions and social change which will ripple through society.

OUR COMMITMENTS AND TARGETS

UN Sports for Climate Action

When we were forming a recovery plan during the COVID-19 crisis in 2021, our leadership team decided that a recovery back to business-as-usual was not sufficient. We had to build back better, in the context of global challenges and create a new pathway forward that encompassed environmental impact too, rather than only social and economic. We needed to take sustainability more seriously, but we weren't sure, as a sport organisation, where we were meant to start, or what we were meant to focus on.

Cue the **United Nations Sport for Climate Action Framework (UNS4CA)**. This provided the science-led roadmap we needed specifically for sport - to Measure, Understand, Take Action and Inspire, and guiding principles to follow:

- Undertake systemic efforts to promote
- greater environmental responsibility
- Reduce overall climate impact
- Educate for climate action
- Promote sustainable and responsible consumption
- Advocate for climate action through communication

As a signatory, Munster joined over 300 global sport organisations with a collective ambition to drive climate action and publicly commit to reducing our carbon footprint. We are still one of a very select number of rugby clubs in the world to sign up to the ambitious framework and are holding our own alongside some of the biggest entities in the sporting world.

Each year, we attend the UNS4CA AGM in London and participate in discussions on how sport as a collective should move forward and what decisions and messaging should the sport initiative take to COP and governments of the world. It also provides a network for us to engage with fellow signatories on what works and what doesn't, so we don't have to the reinvent the wheel. Collaboration across sport accelerates everyone on their journey.

Our targets aligned with the framework, are ambitious, in line with the Paris Agreement and its goal of limiting global temperature rise to 1.5°C above pre-industrial levels. Our most important target is the **reduction of absolute emissions by 50% by 2030** against a 2019-2020 season baseline, with a long term target of **net zero by 2040**. Onto this we are striving for a reduction in fan travel emissions, an area which the entire world of sport is grappling with. Our commitments affect every part of the club, including taking responsibility for the impact of supporters within our sport. Though not in our direct control, our supporters are an integral part of the club and are on this journey with us. We wouldn't dream of leaving them out of the picture but rather find ways to co-design solutions with them so we can create this new future for the club and our local communities together.

The framework is currently being updated and we have contributed to its changes. Reporting frameworks are constantly changing and part of our journey is to keep learning and adapting as we go.

In 2024, under the framework requirements, we updated our **Climate Transition Action Plan** which details our actions to reach our 2030 target across various categories to the best of our ability The plan will continue to be updated season-on-season.

UN Global Compact

In 2022, we also became a participant in the UN Global Compact. This came about through our close relationship with a patron via our Patrons Programme. We want to speak the same language as companies we work with. Our partners, sponsors and patrons amplify our environmental and social impact and can accelerate our journey towards our targets.

This required a public commitment from our CEO and submission of an annual Communication on Progress (CoP). We now align our operations with the Ten Principles covering human rights, labour standards, environment, and anti-corruption. With over 15,000 companies and 3,000 non-business signatories based in over 160 countries, involving 69 Local Networks, the UN Global Compact has become the world's largest corporate sustainability initiative since its launch in 2000, accelerating change at scale to deliver on the SDG targets by 2030.

Munster look forward to working with the newly established Global Compact Network Ireland in the coming seasons to promote the #TenPrinciples and #SDGs, paving the way in advancing sustainable development and fostering resilient business practices across Ireland and beyond.

Sustainable Development Goals

We use the Sustainable Development Goals or 'SDGs' to make sense of wider challenges across environmental, social and economic sustainability and to understand and promote how our day-to-day rugby activities can contribute to the Global Goals. This helps us to connect the dots and will become a crucial part of our learning at the club.

Munster supports the Sustainable Development Goals

BUILDING UP THE PHASES: OUR JOURNEY SO FAR

2021

- UN Sport for Climate Action signatory
- COO adopts environmental sustainability in leadership role

2022

- Stadium LED floodlight upgrades
- In-house climate and sustainability advisor appointed
- Transitioning car fleet to fully electric
- UN Global Compact participant
- First Climate Action Plan developed
- Measured baseline carbon footprint

2023

- Solar panels installed at Virgin Media Park
- Water refill stations for staff and players
- Reusable beer cups trial – Thomond Park
- Published first sustainability report
- First fan sustainability survey
- Fan travel engagement campaign, 'Munster March'

2024

- Organised bus offering expanded
- Updated Climate Transition Action Plan

2025

- Published second sustainability report

2026

- Staff and player training on climate and sustainability
- Open Cork Centre of Excellence facility
- Won 'Report of the Year' at global Sport Positive Awards 25
- Third party verification on emissions and targets
- Joined-up Sustainability Strategy
- 25% operational footprint reduction

2030

- 50% emissions reduction against 19/20 baseline

ATTACK

THE EMISSIONS

CLIMATE MITIGATION

REACHING NEW HEIGHTS

OUR ENERGY TRANSITION

Our energy transition kicked off with upgrading light fittings. That led to a game-changing ten-year commercial partnership which now sets us on an exciting renewable energy journey for others to follow.

We need energy for everything:

- for running stadiums, heating, lights, food preparation, appliances, devices, sport analysis equipment
- for heating and hot water
- for transport and groundskeeping

It's what makes the club tick!

Clean energy benefits communities. It lowers energy bills, brings more resilient power grids, cleaner air and good paying jobs in the green economy.

Munster wants to be part of a community that's bringing energy independence to Ireland and leading the way to create a bright future for our kids.

While it first began with increased efficiency and measuring our impacts, we're now reaching new heights:

- generating our own renewable energy
- electrifying our car fleet
- upgrading to LED floodlights
- partnerships powering rugby development, participation, diversity and inclusion within our communities
- using our voice to play our part in a shift towards renewables in Ireland and beyond

We would like to share this journey - our achievements, our challenges and the teamwork required to bring about positive change.

POWERFUL PARTNERSHIPS: PINERGY X MUNSTER

OFFICIAL ENERGY PARTNER

We first embarked on an energy journey together in 2017. Since then Pinergy, Munster's official energy partner, have strengthened their partnership with us into a 10-year long term game-changing collaboration for the club. This brings solar panel installations, energy management systems and charging infrastructure which would otherwise have taken us much longer to bring to fruition. This is enhancing our energy ecosystem and changing our energy habits across Munster Rugby. The journey together has led us beyond electricity to how we get around, how we drive rugby development in our communities and how we bring world-class sporting events to our province.

INTERIOR LED LIGHTING RETROFIT

The journey with Pinergy began back in 2017, with the retrofitting of LED lighting in the interior of Thomond Park. LED lights significantly reduce our operating costs of lighting and last longer than conventional lighting systems.

ACUTRACE ENERGY MEASUREMENT

Over the past three years, Acutrace energy measurement systems have been installed in Thomond Park to help the stadium team better understand the use of electricity across the campus. Better understanding of energy will help the stadium team to optimise consumption of electricity.

HEATZONES

In November 2019, Pinergy and Munster Rugby announced the introduction of HeatZones across Thomond Park stadium using the latest electrical heating systems to ensure that the supporter in-stadium experience was enhanced in a sustainable way. This solution was delivered as the preferred alternative to LPG (gas) heaters.

GREENING OUR ELECTRICITY SUPPLY

Pinergy electricity is certified as green under the Guarantees of Origin scheme administered by SEMO and the CRU. Though, Munster's two stadiums are still connected to the Irish National Grid which has gas (fossil fuels) as a significant part of power generation in Ireland, we know that through our purchasing power, the money we spend on electricity for our stadiums, is going towards developing and maintaining renewable energy infrastructure across Europe instead of the expansion of fossil fuels.

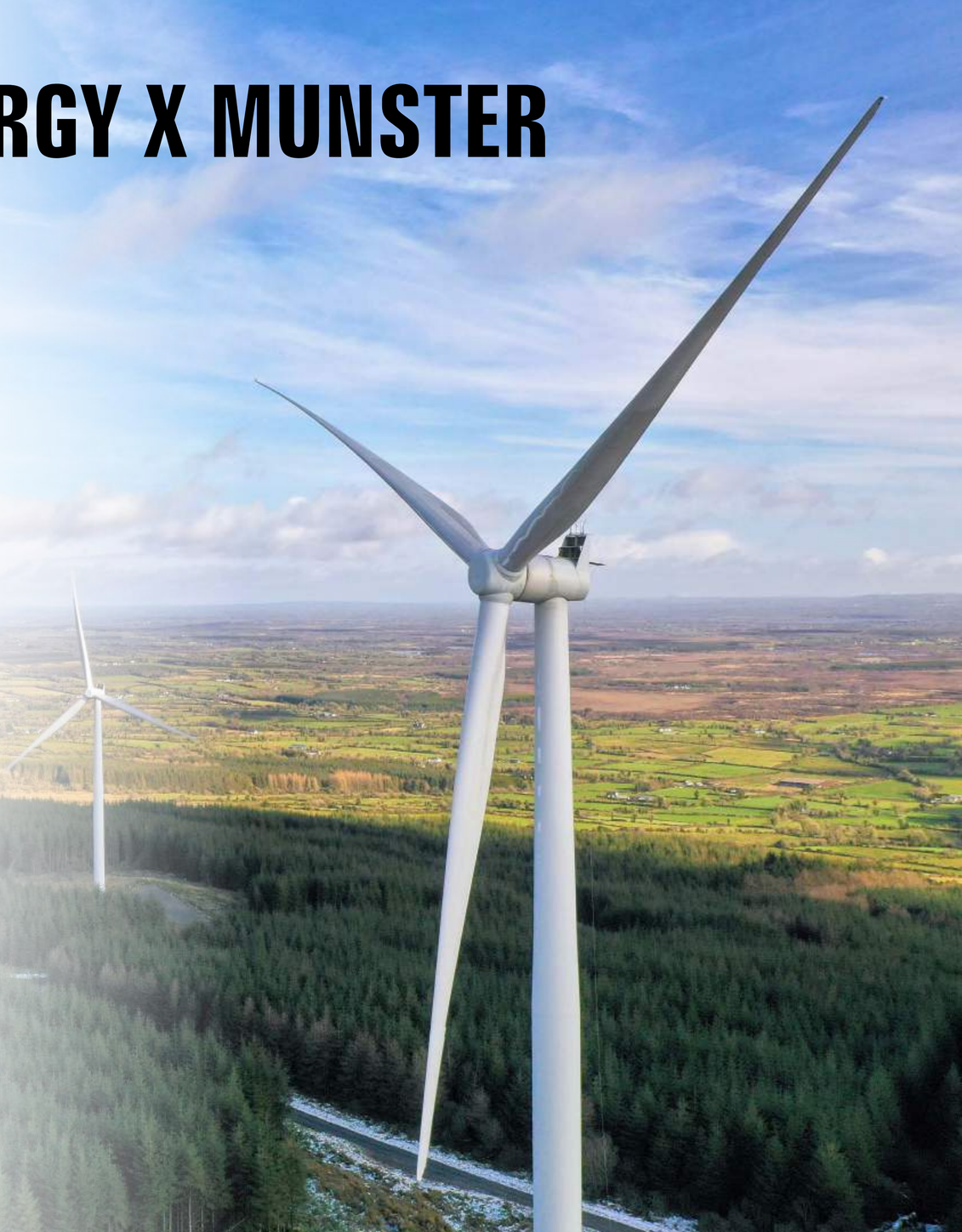
We encourage others to choose energy providers, like Pinergy, which will get us to a low-carbon electricity system faster, through wind and solar generation.

Munster supports the development of clean and safe renewable energy in Ireland so that we are less dependent on expensive imported fossil fuels for our electricity generation. Our counties, Cork and Kerry, battle it out month after month for the title of the 'top wind energy producing county' in Ireland. We want to see an Ireland which can power itself and even become a net exporter of energy, much of which could come from offshore wind energy off our very own Munster coastline along the Wild Atlantic Way.

The climate crisis unfolding across the world, indicates that a switch to renewable energy has never been more urgent.

It is positive to see the strong performance of solar and wind energy as part of our renewable energy mix. Every time a wind turbine or solar panel is generating electricity it is reducing our reliance on imported fossil fuels, helping to push down wholesale electricity prices and increasing our supply of clean energy to local communities.

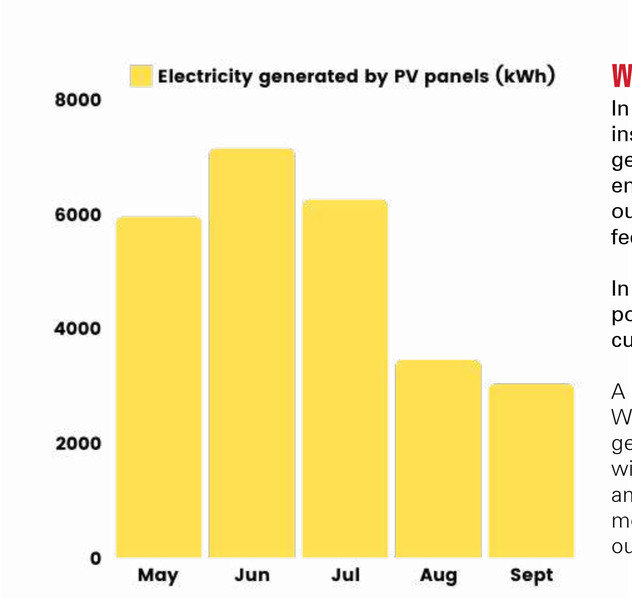
Munster encourages those who can, to consider the switch today.



OFFICIAL ENERGY PARTNER

ACTION HIGHLIGHTS: SOLAR PANELS

During the 2022-23 season, 644 solar PV (photovoltaic) panels were installed by Pinergy at Virgin Media Park stadium in Cork through the partnership. This is one of the largest renewable energy initiatives at an Irish sport's stadium to already be live. These have enough capacity (256 kWp) to power the daily activities at Virgin Media Park and the new Centre of Excellence building (under construction). This has been a huge step forward for Munster - both in helping to decarbonise our own operational footprint and being able to actively promote renewables to a wider audience, since we are now generating renewable energy on site.



WE'RE GENERATING OUR OWN POWER!

In May 2024, Phase 1 of our solar panel installation was switched on. This is already generating power to cover our day-to-day energy needs at Virgin Media Park, including our head office, and any surplus electricity is fed back into the Irish National Grid.

In 2025, Phase 2 will be connected to power our new Centre of Excellence facility, currently under construction.

A massive Munster thank you to Pinergy! We would not have achieved this milestone of generating our own power within this timeline, without their significant investment, support and expertise. We look forward to bringing more exciting ideas to fruition together within our 10-year long term partnership.

Pinergy

OFFICIAL ENERGY PARTNER

POWERING...

...RUGBY DEVELOPMENT IN OUR COMMUNITIES...

Pinergy supports the Munster Schools Boys and Girls Senior Cup competitions, committing to help grow the game and play a part in building foundations for inclusivity and equality in the sport of rugby. Our partnership enables Munster to not only transition our own operations and events to renewable energy supporting our environmental sustainability journey, but contributes to social sustainability too - supporting young people through sport in society and helping to develop more inclusive, cohesive and resilient communities.

..OUR ROLE MODELS TO LEAD BY EXAMPLE...

Kate Flannery and Jack Crowley, our commanding numbers 10s for Munster women's and men's teams, have now become brand ambassadors for Pinergy. Part of their role will be helping to support Pinergy's 'Own the Moment' platform by encouraging supporters and our wider community to proactively take control of their energy habits, informing audiences that today's decisions transform tomorrow.

... AND WORLD-CLASS SPORTING EVENTS

As our presenting partner, Pinergy have been key to Munster bringing three sold-out international touring fixtures to fruition in recent years, with Munster v South Africa XV in the 2022-23 season and Munster v Crusaders - 'the Clash of Champions' in the 2023-24 season at Páirc Uí Chaoimh in Cork. And most recently this season, Munster faced the All Blacks XV in the electric atmosphere of a packed Thomond Park in Limerick, where the All Blacks just pipped the win inside the last four mins of the game. These events help Munster's economic sustainability and that of other local businesses who benefit from increased footfall in Limerick and Cork cities.

Our Commercial Partnerships Reach All Parts Of The Club And Connect To All Parts Of Sustainability.
Sustainability Isn't Just About Doing Good, It's Smart Business.

DRIVING AN ELECTRIC FUTURE: OUR EV PROJECT CROSS-PARTNERSHIP

Pinergy | Munster Rugby | KEARYS MOTOR GROUP

OFFICIAL ENERGY PARTNER

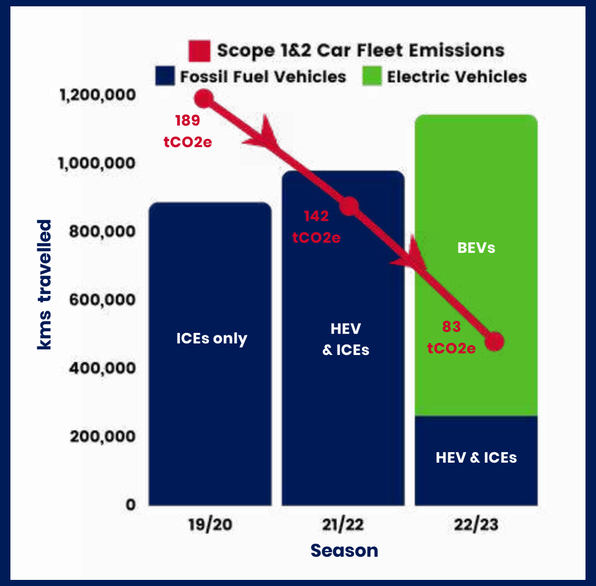
OFFICIAL MOTOR PARTNER

By measuring our baseline 2019-2020 season carbon footprint in 2021, the inclusion of our petrol and diesel car fleet driving 888,294km per season responsible for 189tCO2e of scope 1 emissions, jumped out as an immediate action area within our operational control.

Whilst we first considered a reduction of cars and journeys, this was not feasible due to the nature and importance of the work of our rugby development department, who travel significant distances between counties to serve schools and grassroots clubs all around the province. They need flexibility to cover their catchment areas as we aim to increase participation in rugby across the province, and give everyone who wants it, the opportunity to play rugby. Using car alternatives like buses and trains for work are not feasible yet in rural areas or between towns. A number of our professional players and coaches also take up the option of using fleet cars, as well as a smaller number of support and administration staff.

We decided to electrify our fleet. This was still quite an investment of club funding and a big shift to our normal operations. We needed assistance, the latest technology and expertise in cars and electricity. Cue our energy partners, Pinergy and our motor partners, Kearys stepping up to the plate with us in a cross-partnership to accelerate our journey and create the right roadmap for a quick win.

Since 2022, we have been migrating our car fleet from fossil-fuel internal combustion engines (ICEs) to hybrids (HEVs) to fully electric vehicles (BEVs). By the 2022-2023 season, 882,247 kms were electrified and 262,675 kms of the car fleet were a mixture of hybrids and ICEs. This season, 24 of 31 vehicles in our car fleet, 77%, are fully electric. Working with our staff to ease this transition and manage their travel demands, the small number of staff remaining on petrol and diesel ICEs have switched to hybrids (HEVs) in the 2024-2025 season. We are hoping to shift all cars to fully electric by 2026 as technology, range and supply improves.



CAR TYPES
EV - Electric Vehicle
BEV - Fully Battery Electric
PHEV - Plug-in Hybrid Electric Vehicle
HEV - Hybrid Electric Vehicle
ICE - Internal Combustion Engine (petrol or diesel fuelled)

AS OUR FLEET KILOMETRES INCREASE, OUR EMISSIONS DECREASE!

As Munster grows participation in rugby, this means we have more Rugby Development Officers working in more communities and doing more sessions with clubs and schools all around the biggest province by land area in Ireland. As we grow this part of the club, our mileage (kms travelled) increases... but our fleet emissions are falling.

It's working. Our latest data, as the graph illustrates, shows it is possible to de-couple growth in our activities to develop the game of rugby in our communities from our transport emissions.

This was only made possible, in a short space of time, through our cross-partnership with Pinergy and Kearys, using innovation, collaboration and a collective determination to make positive changes.

Together with our staff, players and coaches, who were willing to adopt the changes in their homes and day-to-day travel habits and learn how to use a new system, we collectively embraced the latest technology and efficiency to put climate acton into action.

Sustainability is a TEAM sport

Real change is possible and worth it. We hope to continue this trend, growing the grassroots and women's game whilst simultaneously lowering our fleet emissions (and air pollution) by electrifying our car fleet, side by side with our partners.

EV CHARGING INFRASTRUCTURE

EVs were not a practical solution for our staff, players and coaches without accessible and easy to use charging infrastructure in their homes and at our properties.

In 2023, as part of the EV project partnership, Pinergy installed the latest Easee EV charging technology solutions in our staff members' homes, to help power their EV battery every morning. Based on their needs, each EV driver was supported with the Pinergy PowerUp App which enables them to control and manage their charging needs.

Chargers were also installed at Virgin Media Park and Thomond Park to facilitate an easier transition for all staff to electrified transport solutions, including those commuting to work in their own EVs or plug-in hybrids. These charging points cannot yet accommodate our supporters charging onsite for match days. Munster has however been deemed eligible for the Shared Island Sports Club EV Charging Infrastructure Scheme and through this we hope to deliver more charging solutions.

EV chargers outside Thomond Park stadium in Limerick

Transport accounts for one third of Ireland's energy requirement and energy related carbon emissions and is almost entirely dependent on oil. Road transport accounts for 95% of all transport emissions, and passenger cars are responsible for 50% of those. It is also responsible for localised air pollution in our communities.

A NOTE ON THE BIGGER ENERGY PICTURE

We know that EVs are not the silver bullet when it comes to reducing our transport emissions in Ireland nor are they accessible to everyone yet due to cost and circumstance.

But, where public transport is still limited, particularly in our corner of Ireland, EVs are a genuine option for many people to reduce emissions quickly and sharply in the next few years and we encourage more people to make the shift to EVs if they are able to do so for their day-to-day or business travel. Some of our pro player EV users are now more comfortable promoting the use of electric cars with our supporters, after making the switch themselves and knowing what is involved.

Public transport and active travel remain the top travel choices when it comes to the transformation of our transport system that we need. We encourage collective travel to our events, where people can more feasibly travel together on matchday by bus, train and carpooling to the stadium to reduce cars and congestion on the road, or by walking and cycling if you live in the city - the healthiest option! We hope to co-design practical solutions with our supporters for this (a taster of which is coming up in the next section of this report)!

LED FLOODLIGHTS

Munster installed new LED floodlights at both Thomond Park stadium and Virgin Media Park stadium over the 2021-2022 and 2022-2023 seasons via our own capital investment of club funds. This lowered their output from 248kW to 144kW, a 42% energy reduction

HVO GENERATORS

Another investment by the club, has been in 2 new HVO generators which were installed at Thomond Park in 2024 and power our LED floodlights. HVO, Hydrotreated Vegetable Oil, is a biofuel, and a lower emission alternative to diesel. We have also increased capacity coming into Thomond Park to reduce dependence on additional generators brought onto site.

ENERGY HABITS & CULTURE SHIFT

These little signs can be seen dotted near light and appliance switches inside Munster's office and High Performance Centre, reminding staff and players to be more energy aware in-house. Energy is spoken about more now, and awareness of how we use electricity and fuels is increasing. Awareness turns into action, our habits are changing. We can only raise awareness as a club in a meaningful way, when we are self-aware ourselves.

FLAME & SMOKE EFFECTS, OCCASIONAL PYROTECHNICS

Special effects are part of stadium entertainment all around the world and in Ireland these days, and part of hosting world-class events.

Some concern was raised by supporters, within our fan sustainability survey in 2023. As a result, we engaged with our pyrotechnics and special effects suppliers to collect data and measure the actual impacts of our flame effect machines (and smoke effects for certain matches).

The data showed that combined, the 6 flame machines, fuelled with propane canisters, emit < 35kgCO_2e per match. This is roughly equivalent to one fossil fuel powered car driving from Cork to Dublin. These are scope 1 emissions (burned on site), but they are also very minimal within our overall footprint, and are not considered material for tracking under the framework we report under. CO_2 for the low smoke effects has no net impact as the CO_2 is extracted from the air.

Based on the data available, we will continue with our regular flame effects for fixtures each season but we will continue to work towards lower emission alternatives with our suppliers in the coming seasons, address concerns where needed and seek further data to determine whether there are other pollutants at play here.

During the All Blacks XV match in November we also had some pyrotechnics which are higher emissions than the flame machines, but these are rarely used, only for very significant historical club occasions. It isn't every day the All Blacks come to town!

We also had our first interactive LED light display allowing supporters to use the StadiumFX app on their phones to light up the stadium, a low-emission and more engaging form of stadium entertainment. These combine with the lighting effects from our new LED floodlights to #LightUp Thomond Park and put on quite a show.

Our focus for the club to become sustainable has always been to go hard on the bigger material sources of emissions first, like travel, heating and electricity, in combination with using our influence to raise awareness. These are where we can make the biggest and fastest gains for contributing globally to reducing emissions. As each season passes however, and we get more data, we will continue to learn about our impacts and continuously adapt to finding better solutions.

TRANSITION CHALLENGES & LESSONS LEARNT

TIME
While our solar panel installation was very quick, the planning permission stage and connection to the Irish National Grid took several months each. It doesn't happen overnight, it was nearly a 3 year process in total.

INVESTMENT OF CLUB FUNDS
Sign offs of significant club funding which needs to stretch across many aspects of club activities was required to put new lower emission solutions in place - from LED floodlights and LED advertising boards to electric vehicles. We do not have access to unlimited funding. We would love to have energy storage with our PV panels but this is cost prohibitive at the moment. Certainly something we will look at in the next few years.

STRUCTURAL ISSUES
The iconic roof structure and shape of Thomond Park stadium has been deemed unsuitable for the installation of solar panels at present, following a feasibility study. We will keep looking at potential options on our energy transition journey and as technology and solutions improve.

STRATEGIC PARTNERSHIPS
These are gamechangers for accelerating action. We cannot do this alone. We will continue to work with our current commercial partners, look to engage new partners, engage on government grants and other sources of funding to transform how we use energy towards a climate-resilient model. We also would like to collaborate more broadly to bring the benefits of clean energy solutions into our local communities.

CAR DEPENDENCY
We are a car dependent society. Munster is not able to just ditch cars quite yet. Our activities still require fossil fuels. Our events generate journeys for our staff, players and supporters who use fossil fuels. We still work with fuel distributors who provide the fuels for these journeys. The situation isn't perfect. Cars will be part of our journey for quite a while yet, but we can still make impactful changes in how they are powered and reducing car use which can really make a difference to emissions reduction due to cumulative effects.

STAFF & PLAYER ENGAGEMENT
The energy transition has meant our staff and players changing habits and behaviours on our own energy consumption and car use. This has had its challenges as change is hard. Everyone going on the journey, learning together and talking about the issues, helps to ease this.

SUPPORTER ENGAGEMENT & FEEDBACK
Some questions have been unexpected - like supporter concerns about our flame effect machines. We understand we must communicate our story better - our actual impacts, data and actions to explain where we have negative impacts and how we are trying to solve those. It helps to bring others along, to understand where we're at and contribute to the journey if they want to.

DATA & LEARNING
To measure is to know. Keeping track of our electricity, gas and greenhouse gas emissions means we know exactly where we are at in terms of progress. This allows us to make informed and timely decisions, so our resources are put towards the right solutions, at the right time, in the right way. Our partners have been pivotal here in helping us to embrace new technologies on the market, and learn how to use them effectively.

LOOKING AHEAD

Ireland's energy transformation, from development of grid infrastructure, to the need for decarbonised, secure and affordable electricity will require a much higher share of community participation. This means raising awareness and turning awareness into action.

This transformation needs public support to become a success story. Being a leader means setting an example for others to follow and wide cooperation with market players, government departments and local communities to master the challenges of the energy transition.

We will continue to lead by example and use our influence.
We will connect this to rugby, to our local communities, to set our kids up for a bright future.

We will play our part.

ENGAGING SUPPORTERS

The most important ingredient in our recipe for taking real and credible climate action lies in **engagement with our supporters**. This is the key to how we unlock our collective ability to positively shift social norms and take climate action at a scale that will really make a difference. We don't see our supporters as being apart from the club, but rather a part of it. They inspire us, as much as we inspire them, and we need them now more than ever before. But how do we harness this unique passion, and funnel it in new, exciting and genuine ways towards tangible climate action?

Part of the journey will be:

- Raising awareness on the power of collective action and how sport is best placed to mobilise this. Inviting supporters into action areas that can make a credible difference at scale.
- Enhancing matchday experiences including travel options
- Partnerships and technology which can help us to improve engagement
- Data which allows us to design solutions which are practical and convenient, and lead to actual results
- Senior Munster players speaking about their own experiences of how to bring about collective action and bring dreams to fruition, in the context of sustainability
- Fan Sustainability Surveys
- Co-creating solutions with our Munster Rugby Supporters Club (MRSC) and wider supporter base
- Relatable communications which inspire and help connect to the bigger picture

Munster intends to work hard on how we can get everyone at the club to participate on every level and contribute in a way they feel comfortable to do so. It isn't a one-size fits all approach. We will need many ideas, solutions and options for supporters to engage with us. We are early days with this and we do not have it all figured out, yet.

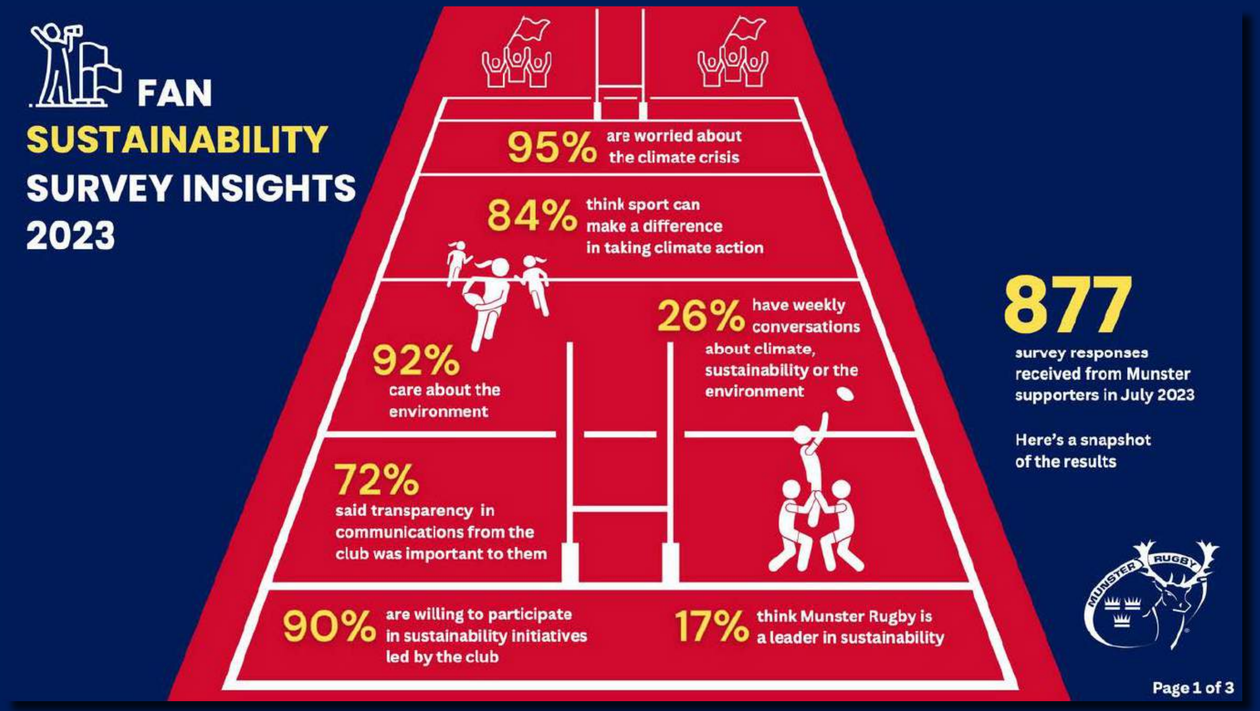
We started by asking our supporters what was important to them about how we approach sustainability and climate action. This brought different and broader perspectives. We then undertook a pilot project to start engaging with supporters on the issue of fan travel, the source of the largest emissions by the club, plunging head first into some of the more difficult issues to help us to develop solutions.

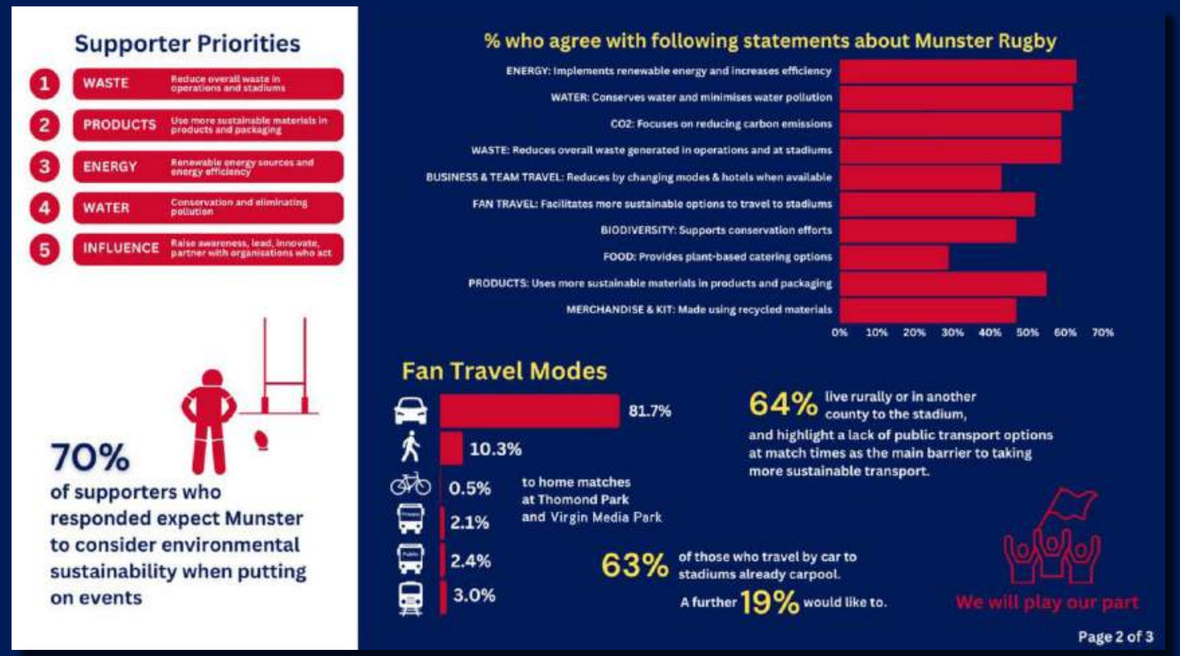
Sport can inspire change and shift social norms. It helps us believe in what's possible and shows society real life examples of working toward goals and achieving things that are hard, but worth it.

In July 2023, we surveyed our supporters asking for their input and ideas for co-designing solutions on sustainability at the club. We also asked about their attitudes and perceptions towards climate change to assist us with our engagement and communications and how they thought Munster was doing overall.

In January 2024, we published the following results. We also provided an update on actions directly relating to supporters' key concerns and suggestions provided in the survey via a website article.

As part of the 'Munster March' campaign an overview of the insights from the survey were also presented to adidas and their other sport partners - such as Arsenal, Man Utd and Juventus reaching a global audience and getting interesting feedback.





We're admittedly, a little behind on our next fan sustainability survey, as we got so much information in the first one, which we are still working into our solutions.

Figuring out the best ways to engage our supporters, so that everyone in the club can participate and contribute, is central to our sustainability strategy.

POWERFUL PARTNERSHIPS: ADIDAS X MUNSTER

OFFICIAL KIT SUPPLIER

Munster and Bayonne supporters gather on Bedford Row in Limerick City Centre. Fittingly, the Richard Harris statue was chosen as the meeting point for the walking march. Harris was a Limerick native, a proud Munster Schools and Munster U20s player in his day, and a patron of Munster Rugby in its truest sense. He remained an ardent Munster supporter throughout his legendary film career.

Marching band leading the walking march over the Shannon River and along Clancy's Strand in Limerick

A sea of red... descending into Limerick from all directions.

MUNSTER MARCH

During the 2023/24 season, we partnered with adidas on a fan travel pilot campaign to mobilise our supporters and raise awareness on the benefits of active travel, public transport and car-sharing for match day travel.

Our objective was to enhance the match day experience by fostering a community that collectively travels in a healthier way which strengthens social connection, while promoting physical activity, wellbeing and community among supporters.

A key feature of the campaign was a collective walking march for supporters behind a brass band along the 'Red Mile' from Limerick City Centre to Thomond Park to raise awareness of the club's commitment to climate action and show the power of collective action by supporters.

Munster March' approaches Thomond Park

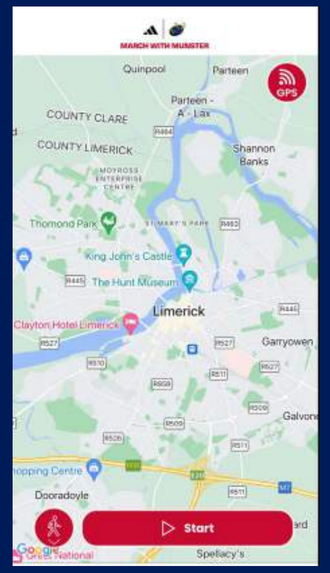
FAST FACT:
Fan travel accounts for over 70% of Munster's carbon emissions when matches and concerts are included. Over 80% of supporters travel to our stadiums by car. Reducing car journeys and switching to alternative modes will bring about the largest reduction in emissions

MUNSTER MARCH CAMPAIGN COMMUNICATIONS AND INCENTIVES

OFFICIAL KIT SUPPLIER

#MARCHWITHMUNSTER

'Munster March' content was shared by Munster, adidas, MRSC (supporters club), International Rugby Experience, Limerick City and County Council and others on social media channels to raise awareness and promote the campaign in the build up to matchdays.



Supporters were asked to download an app and track their journeys to Thomond Park on match day, via different modes of transport - walking , cycling, bus, train and car-sharing, incentivised by prizes for participation.

MUNSTER MARCH CAMPAIGN COMMUNICATIONS AND INCENTIVES

OFFICIAL KIT SUPPLIER

#MARCHWITHMUNSTER

Players Mike Haley and Joey Carbery walk and chat with supporters on the walking march from Limerick City Centre to Thomond Park, December 2023

Our senior men's and women's players shared their thoughts on sustainability and the importance of team work in taking on any challenge; what matters most and how we drive each other on, leading by example. This content was shared on our social media channels during the campaign and on players own personal accounts. A video of club actions and leadership approach was also shared on the Big Screen at Thomond Park at half time.

SMALL STEPS TAKEN TOGETHER CAN MEAN HUGE STRIDES FORWARD IN THE CLUB'S COLLECTIVE ABILITY TO AFFECT POSITIVE CHANGE.

So, did it all go perfectly? No, of course it didn't. This was a pilot project. We wanted to learn as much as possible along the way, to enable us to co-design solutions and test ideas with our supporters and partners on how best to engage on travel. The campaign ran across the busiest part of the 2023-2024 season from December to February including three of the biggest matches:

Munster v. Bayonne at Thomond Park: a reasonable turnout in the hundreds for the walking march for the first European match of the season. The weather was good. Some engagement on social media.

Munster v. Northampton at Thomond Park: Storm Isha was on its way at the time of the walking march with a rainfall weather warning. This put supporters off walking to the match, and we had an inevitably low turnout, below 100.

Munster v. Crusaders at Páirc Uí Chaoimh: The last leg of the journey, bringing supporters together for food and entertainment at Marina Market first, then walking out to the stadium together en-masse with a marching band. This had the largest turnout, given the 40,885 attendance, but it was also the shortest distance.

Many supporters who participated in the walking marches commented that, they enjoyed:

- the music and entertainment of the marching band
- the idea of the 'sea of red' marching through the streets and descending on the stadium together
- chatting and getting selfies with the players on the walk
- the inclusive family atmosphere
- coming together as a collective
- welcoming the players from both teams coming off the team buses at Thomond Park

Information from the campaign is now helping us to build a strategy for both supporter engagement and fan travel solutions. This is a huge area of climate action for the club, and one which brings both the greatest challenge and greatest opportunity. We want everyone to come with us, and we're open to suggestions! There's no silver bullet to fix our travel challenges, enhance the matchday experience, do it inclusively so no one gets left behind, pack out our stadiums whilst decarbonising at the same time and in the south-west of Ireland, where public transport options are limited. Bringing people together to travel together, to march together, to bring benefits to local communities together can also bring social connection and cohesion.

We'll need to get the creative hats on for this one, and we're asking everyone to come on board the sustainability bus. We want to facilitate collective travel options which are practical, affordable and where there is an option for everyone:

- organising buses from local communities - rugby clubs, towns and cities to stadiums
- car-sharing - pack up the cars, so there are less cars on the road
- public transport - trains
- public transport - buses
- active travel - walking
- active travel - cycling & scooting
- electric cars

We must re-imagine a better way which brings us even closer together, revitalises and strengthens us.
We can organise, collaborate and communicate, but it will be our supporters who bring the magic, the enthusiasm and the passion to this.

OFFICIAL KIT SUPPLIER

adidas, a world leading sports brand needing no introduction, have been our official kit partner for 17 years.

Our partnership provides us with world-leading sports apparel for our players, staff and supporters. They provide access to educational and networking opportunities with other adidas partners in rugby and football to advance sustainability in the sport and sportswear industries collaboratively.

Their innovation in recent seasons has resulted in kit across the 23/24 and 24/25 seasons made from recycled materials. We are working with adidas to improve data quality and our understanding of the impacts of kit and merchandise within our operations, which is a significant challenge given the complexity and scale of the sportswear industry's supply chain.

adidas and their partners 17 Sport brought expertise for campaign design, communications and content creation that we needed to run the Munster March pilot project. It took months of preparation work through the 2022-2023 season to launch the campaign for the 2023-2024 season. It involved staff and players, MRSC (Supporter Club), local marching bands, local councils, locals businesses. It was a lesson in wider collaboration and a flavour of what it will take to shift our in-grained travel habits, systemic infrastructural issues and car dependency in Ireland.

'Fan travel' is a very new area of engagement within the world of rugby, but is critical to rugby reducing its emissions and improving matchday experiences.

A massive Munster thank you to adidas (and 17 Sport)!
They were not afraid to jump into the deep-end with us in testing out solutions and engagement ideas for fan travel. Their partnership and expertise have sling-shot us forward on this journey.

And a very special thank you to the MRSC and our dedicated supporters who engaged with the Munster March campaign and completed our sustainability survey.

FAN TRAVEL ENGAGEMENT CHALLENGES & LESSONS LEARNT

TIME & RESOURCING
The campaign took 14 months of preparation work behind the scenes before launch. Our operations and communications teams have a significant workload in preparing for events. Improving how we travel to stadiums is a new and complex challenge but one which is part of the matchday experience and inherently linked to our activities. Senior players also have a hectic season of high performance training, preparation and travel schedules, which can mean interview content can only be created at certain times during the season.

PARTNERSHIPS
The MRSC, Munster Rugby's Supporter Club, go beyond partnership with us. They are part of the club - from mobilising supporters, disseminating information and designing solutions that work. They turn up match after match, season after season, win lose or draw with passion and tenacity which keeps everyone moving forward. We will never ask too much, but we keep asking them to be along side us in tackling that which is hard but full of new untapped possibility for the club.

adidas and their partners 17 Sport were pivotal in providing the resources and support for this campaign. We are a club who learns by doing, and this campaign provided us with the insights of what works, what doesn't, what's possible with real life experiences. The area of fan travel is such that we will need significant partnerships and cross-partnerships with both commercial and non-commercial entities to accelerate our roadmap to more sustainable transport options, sold-out stadiums and enhanced matchday experiences.

CO-BENEFITS
Through the campaign we learned that changes in how we travel can have positive benefits. It can reduce congestion, parking issues and air pollution for local communities. Travelling together rather than individually in cars can strengthen social connection. The 'sea of red' idea can enhance our supporters' world class reputation further still and provide a legendary atmosphere to any and all away fans as they approach the cauldron that is Thomond Park. The reasons for action on fan travel are far beyond environmental, but social. They benefit people. We will need to re-imagine a new way to travel and get to matches together in practical and fun ways. Change can be hard but beneficial.

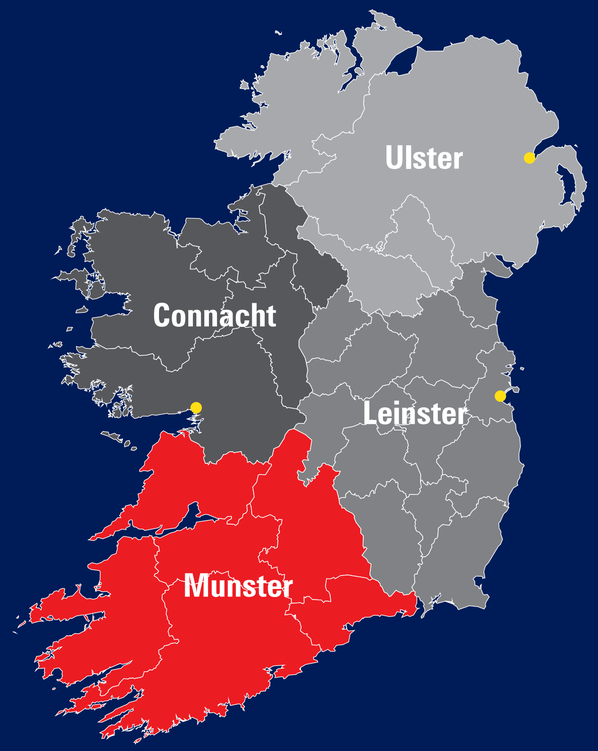
WIDER CITY BENEFITS
The 'Red Mile' route - Bedford Row to Sarsfield's Bridge, along Clancy's Strand and onto Thomond Park - was agreed with Limerick City and County Council prior to the campaign launch, and can be developed further in the coming seasons incorporating local businesses and tourism. Sport events bring footfall into our cities, but better transport infrastructure is needed to help ease congestion and provide a better experience for visitors - bus and train options, infrastructure for organised private buses to get to stadiums. Munster cannot do this alone. Changes here can also benefit local communities, local businesses, other sport organisations and city events. Wider collaboration and joined-up long-term thinking is required.

SYSTEMIC ISSUES
Fan travel is over 70% of the club's carbon footprint (including matches and concerts), due to challenges such as a high car dependency in Ireland and travelling long distances to stadiums. We take responsibility for these emissions, as our supporters are an integral part of the club, and we host the events which trigger the travel requirement. However, public transport is still very limited in our part of the country. Event travel is often an afterthought in city-planning, and secondary to school and work travel infrastructure. We see sport event travel as an opportunity to encourage and incentivise alternative modes of travel and strengthen social connection. It can help to improve infrastructure for cities and local communities for other events and tourism, but it will require a holistic approach at local and national level.

PERCEPTIONS
While waste was identified as a top priority by supporters in our survey, our carbon emissions data indicate that a reduction in fan travel emissions could make the most significant climate action contribution by the club. We will need to ensure we communicate in such a way which never makes supporters feel alienated or to blame, but rather empower them towards solutions - taking action on waste, travel and many other areas. We will need more engagement to ensure that our communications are clear.

DATA & LEARNING
Fan travel is difficult to measure. Technology and platforms are coming online to help, and we are researching the best options for consideration. There was low uptake on the app that we used, which meant very limited data was available on how supporters travelled. Many more supporters turned up for the walking march than used the app. We will require both partners and our supporters to come on board to tackle this data issue. If we can gather good quality data we are more likely to bring about solutions and develop an engagement strategy that can be most effective. This is why for the moment, within our post-match surveys, we continue to ask supporters which mode of travel they use to get to our stadiums.

PRACTICALITY
We know we need to go far beyond awareness to actively designing alternative options for supporters to travel which are viable and better than their current options. Reliable and affordable private buses from locations which supporters live or can access easily and quickly, car-sharing platforms which allow supporters to provide lifts to fellow supporters, park and ride options with frequent shuttles, good safe walking options with entertainment enroute, free or discounted public transport options at match times, incentives to take sustainable travel options and improved communications will all play a role in a suite of travel solutions in the seasons ahead.

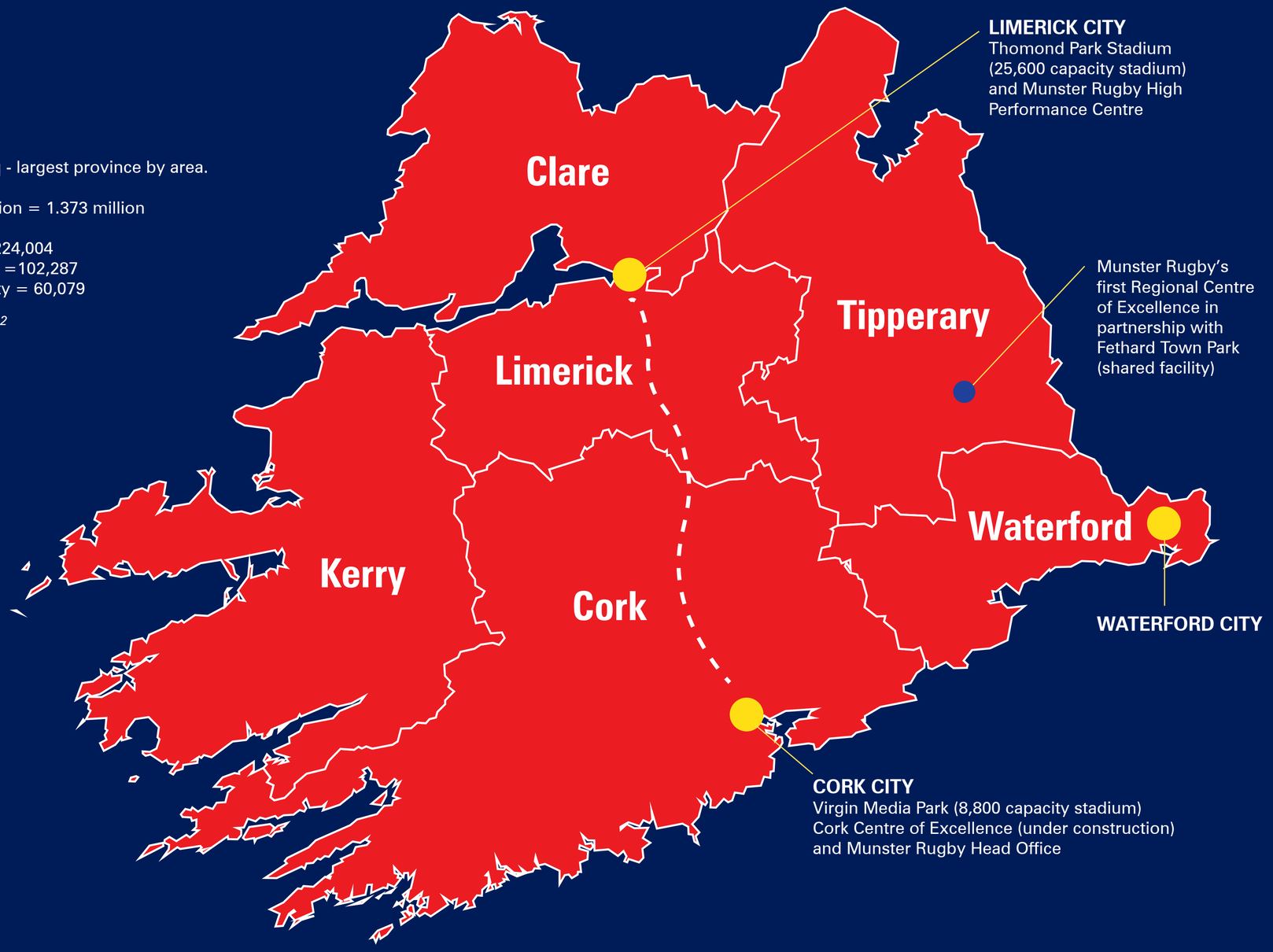


24,675 km sq - largest province by area.

Total Population = 1.373 million

Cork City = 224,004
Limerick City =102,287
Waterford City = 60,079

**CSO census 2022*



OUR TRAVEL CONTEXT

Munster Rugby represents the entire province of Munster in the South-West of Ireland, on the Atlantic coast. This includes 6 counties, 3 cities, 67 rugby clubs, nearly 300 schools and 5 universities.

We have 2 stadiums (approx 100km apart), 1 High Performance Centre, 1 Centre of Excellence (under construction), 1 head office.

As we continue to develop domestic rugby we are moving from a current two-centre base to a defined four-centre 'Centre of Excellence' model which will provide more accessibility to top-class rugby infrastructure cross the province and reduced travel.

This unity across a diversity of people and places, makes us unique in the world for a professional rugby club, and strengthens our culture.

It also adds to our travel challenges, and means we have to work a little harder and more creatively to find the right solutions for us to decarbonise whilst remaining a cohesive and connected province.

OUR OWN TRAVEL HABITS

Sport and travel are intertwined. We cannot realistically tackle emissions from our sport and our negative impacts, without tackling travel. This includes how our staff and players travel too.

All our Munster teams use bus travel for all away matches on the island of Ireland. Buses are very much part of weekly travel activity across the club and an integral part of how we get to where we need to be.

Staff and players are encouraged to car-share as much as possible, and this is common for all training sessions.

We also have a Work-from-home policy which has been embedded at the club and is making a difference in our emissions. Over 30 members of staff work from home 2 days per week.

We also partner with the NTA Smarter Travel Workplace behaviour change programme and plan to develop this further in the coming seasons.

Though only 4% of our overall footprint, team travel may well be the hardest of all to reduce. We live on a small island on the edge of Europe, and our players compete in European wide competitions (including in South Africa). We already travel by bus for all on-island team travel. We take scheduled flights as opposed to charter flights the majority of the time to reduce emissions. We plan to switch remaining small number of charter flights to scheduled when possible to do so. Plane travel is unavoidable to play in URC and EPCR competitions. Contributing to mitigation projects may be the only way to get to net zero in this category, due to aviation unlikely to decarbonise quickly in the next 15 years. If we don't get on the plane, and participate in global competitions we would lose our ability to function as a professional rugby club and lose our ability to influence. This will be difficult for us to tackle alone, we will collaborate with the sporting community and our aviation partners on solutions.

Munster Rugby supports the Irish Government's #YourJourneyCounts campaign to use active travel and public transport to reduce Ireland's transport emissions. By choosing to walk, cycle or take public transport, we are part of the national effort to reduce transport emissions by 50% by 2030.

More options for public transport and active travel across Munster's province can help reduce transport emissions associated with our own events, but also reduce congestion and parking issues which can impact the matchday experience. Better infrastructure in our towns and cities can also support grassroots level clubs in their participation and travel. We will all have a part to play in changes to transport and transport emissions in Ireland.

GOING CIRCULAR

KICKING WASTE INTO TOUCH IS A TEAM EFFORT

We're working with our people, partners and supporters to reduce the overall waste generated, and shift away from single-use toward a culture of reuse at our stadiums and High Performance Centre, whilst also improving recycling efforts.

WATER REFILL STATIONS

Water refill stations have been installed at our two stadiums, High Performance Centre and office for use by our staff and players, visiting teams and referees, with our partners ONA. Staff and players have been provided with a metal reusable bottle and are encouraged to set an example for others in our journey to circularity at the club. Further units will be installed for supporters on stadium concourses in the next phase.

REUSABLE CUPS

Reusable Cup trials have been in operation in the West Stand at Thomond Park over the 23/24 and 24/25 seasons, a huge step towards circularity and reducing single-use plastics on site.

DIGITAL TICKETING

A digital ticketing system is now in full operation at Thomond Park and Virgin Media Park with SafeTix, to allow for a user-friendly, safer and more time efficient mobile ticketing experience. This contributes to our waste reduction targets and promotes the use of technology to save natural resources.

FLAG COLLECTION POINTS

Flag Collection Points are in operation at Thomond Park for selected events, to allow flags to be reused or 'fly another day'.

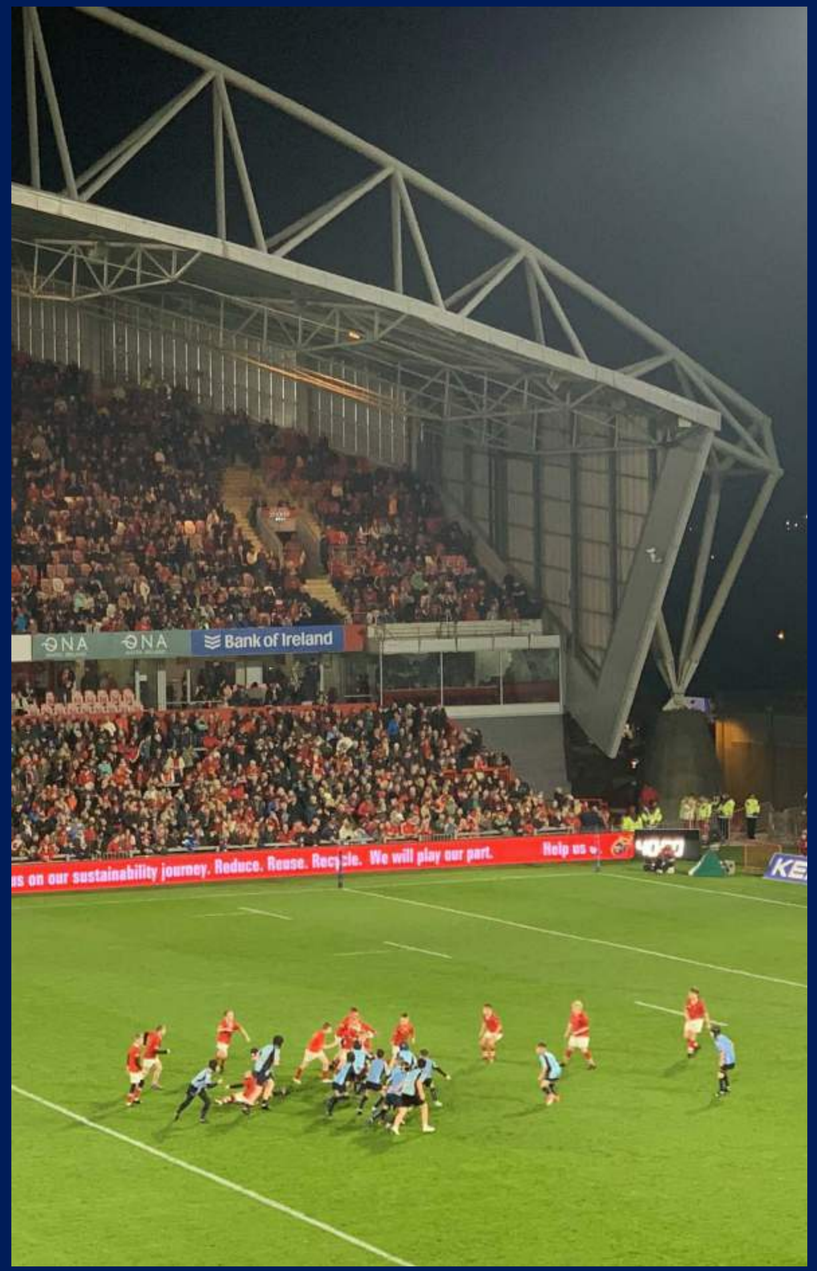
WHAT WE DID - ACTIONS

- Reusable Cup Trials in the West Stand at Thomond Park
- Flag Collection Points
- Reusable Coffee Cups as Supporters Club gift
- Improved waste management
- Water refill stations installed at our three properties and reusable bottles provided to staff and players through our partners ONA.
- Making every effort to order the right quantities of event materials, and reduce packaging
- Digital ticketing system in full operation

We're on a journey with waste reduction and it is proving challenging. We are battling with single-use plastics. There are commercial challenges to circularity, changes to facilities, event staff training, supplier engagement and data management. It is very much a team effort, and we hope to continue to improve season on season.

Our long-term goal is to kick single-use plastics into touch and have zero waste to landfill, but we will need everyone on board, working closely with our partners, suppliers and supporters to do this. It won't happen overnight.

Our staff and players (big water guzzlers to stay hydrated) are leading by example with a transition to reusable water bottles and use of refill stations. Our culture is shifting through day-to-day habits and creating an environment for this to happen.



RECYCLING POINTS

Our recycling stations were upgraded across 22/23 and 23/24 seasons with our partners Mr Binman to enable different waste streams to be handled separately and reduce contamination. Food waste bins are now included on main concourses at Thomond Park.

WE SUPPORT 'RE-TURN'

We operate donation collection points around Thomond Park for 'Re-turn', Ireland's Deposit Return Scheme, for eligible plastic bottles and cans sold onsite.

Due to the number of home matches across a season, installing DRS machines would be considered resource inefficient at present. Instead collection is made after every match or when full by 'Re-turn' collection vehicles with donations going to children's charities in Ireland. Supporters can also choose to take them off site to return at a local collection point.

LED BOARD MESSAGING

Sustainability messaging to encourage our supporters to adopt the circular economy principles of 'Reduce Reuse Recycle' by reusing cups and recycling correctly, were displayed on our new LED boards at Thomond Park during the 2024/25 Season.

MEASURING PROGRESS

2022 - 2023 SEASON HIGHLIGHT STATS

40%
reduction in Scope 1 emissions

133 tCO2e
reduction in Scope 1 + 2 emissions

1
UN Sport for Climate Action Framework signatory status retained

No.1
Munster were the most-watched team over the URC season.

The URC Grand Final, DHL Stormers v. Munster also had highest peak audience ever with over 1 million viewers

1
Interprovincial Championship Trophy (Senior Women)

77%
of car fleet switched to fully electric

882,247 kms electrified =
22 circumferences of Planet Earth

644
solar panels installed at Virgin Media Park stadium

16
home matches hosted

11
music concerts hosted for regional audiences

1
United Rugby Championship Trophy (Senior Men)

26,055
single-use plastic bottles avoided by staff and players with use of reusable bottles + new water refill stations

353,025
return journeys made by supporters & concert-goers to our stadiums

1
UN Global Compact signed

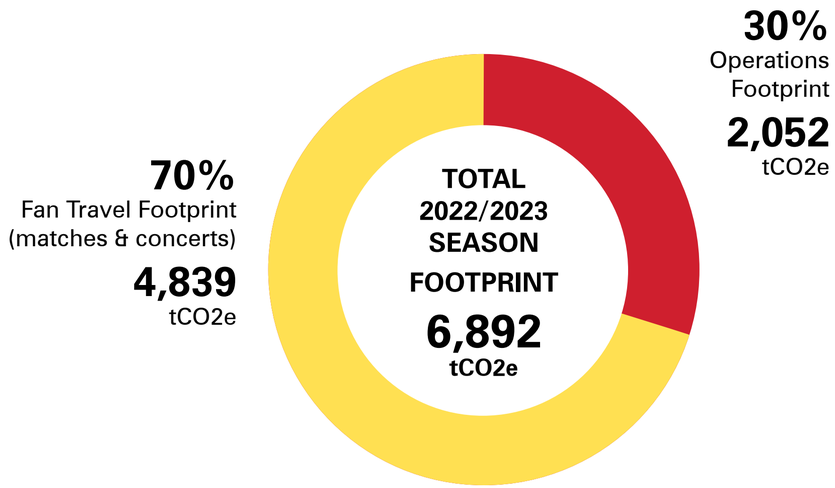
TO MEASURE IS TO KNOW

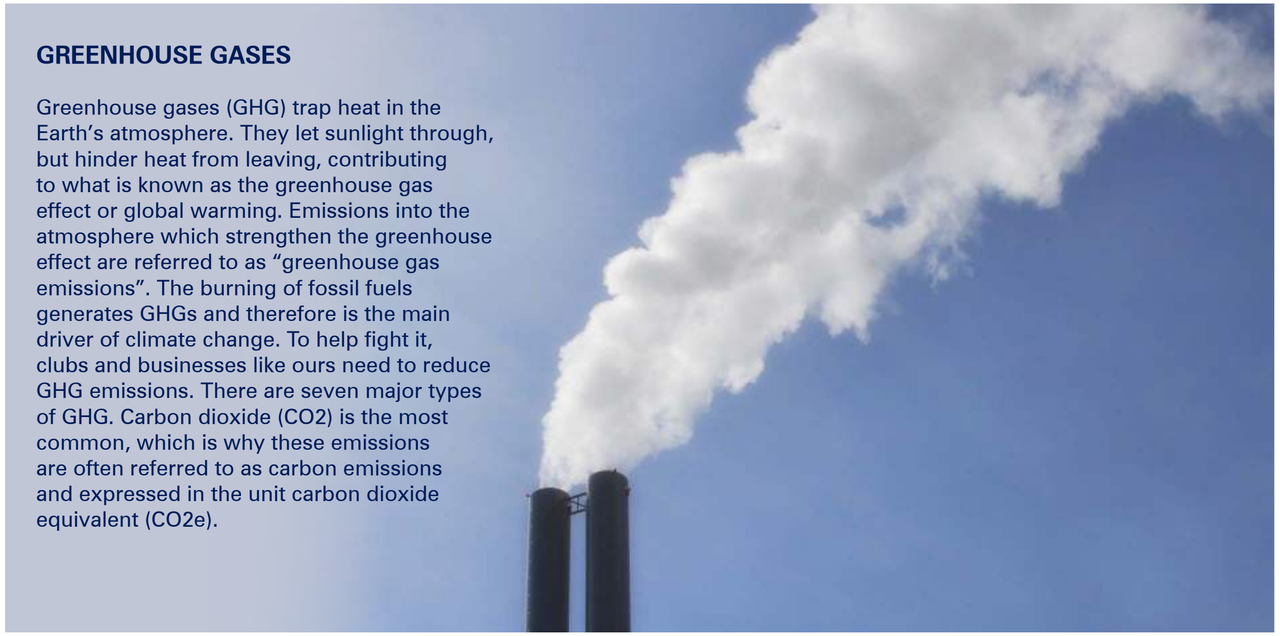
In sport we use data to measure and track our performance and efficiency all the time. It allows teams, coaches, athletes, and analysts to understand performance, evaluate how the team is working together and what game plans might work best. Monitoring progress makes sure that steps from one session to the next are suitable.

Our environmental performance and efficiency is no different. So, we need to go about this in exactly the same way – measure and track our progress.

Our emissions reduction strategy is based on the calculation of our own carbon emissions and gaining a precise understanding of the various emission sources – a decisive step in terms of setting reduction targets and evaluating the success of initiatives and projects.

This assists with making informed decisions in house, so resources can be directed to the high impact areas needed. We can also share our story more transparently as we have the evidence to back us up.





GREENHOUSE GASES

Greenhouse gases (GHG) trap heat in the Earth's atmosphere. They let sunlight through, but hinder heat from leaving, contributing to what is known as the greenhouse gas effect or global warming. Emissions into the atmosphere which strengthen the greenhouse effect are referred to as "greenhouse gas emissions". The burning of fossil fuels generates GHGs and therefore is the main driver of climate change. To help fight it, clubs and businesses like ours need to reduce GHG emissions. There are seven major types of GHG. Carbon dioxide (CO2) is the most common, which is why these emissions are often referred to as carbon emissions and expressed in the unit carbon dioxide equivalent (CO2e).

Our carbon footprint data can be split up in a number of ways to help us to understand it.

One way is to split that which is in our operational control, and that which isn't but we can influence. Fan travel is typically the largest portion of any club's carbon footprint, and is sport's largest emitter. However, this is an area that Munster cannot fully control by itself - the club, supporters, tournament organisers, transport operators, local and national government all have a shared responsibility and role to play here. By decarbonising how we travel to sports events, sport can contribute nationally and globally to transport emissions reductions.

Scientists distinguish between source categories in which companies (or sports clubs) emit greenhouse gases and are therefore responsible for them. These categories are divided into three Scopes (Scope 1, 2 and 3) in accordance with the Greenhouse Gas Protocol. Scope 1 and 2 are easier to measure and to reduce. Most sporting organisations footprints have over 90% Scope 3 emissions, of which travel is the most significant part due to the numbers of people travelling.

OUR CARBON EMISSIONS

2022/2023 SEASON

Scope 1: 180 tCO2e
Scope 2: 257 tCO2e
Scope 3: 6,455 tCO2e

TOTAL FOOTPRINT:
6,892 tCO2e

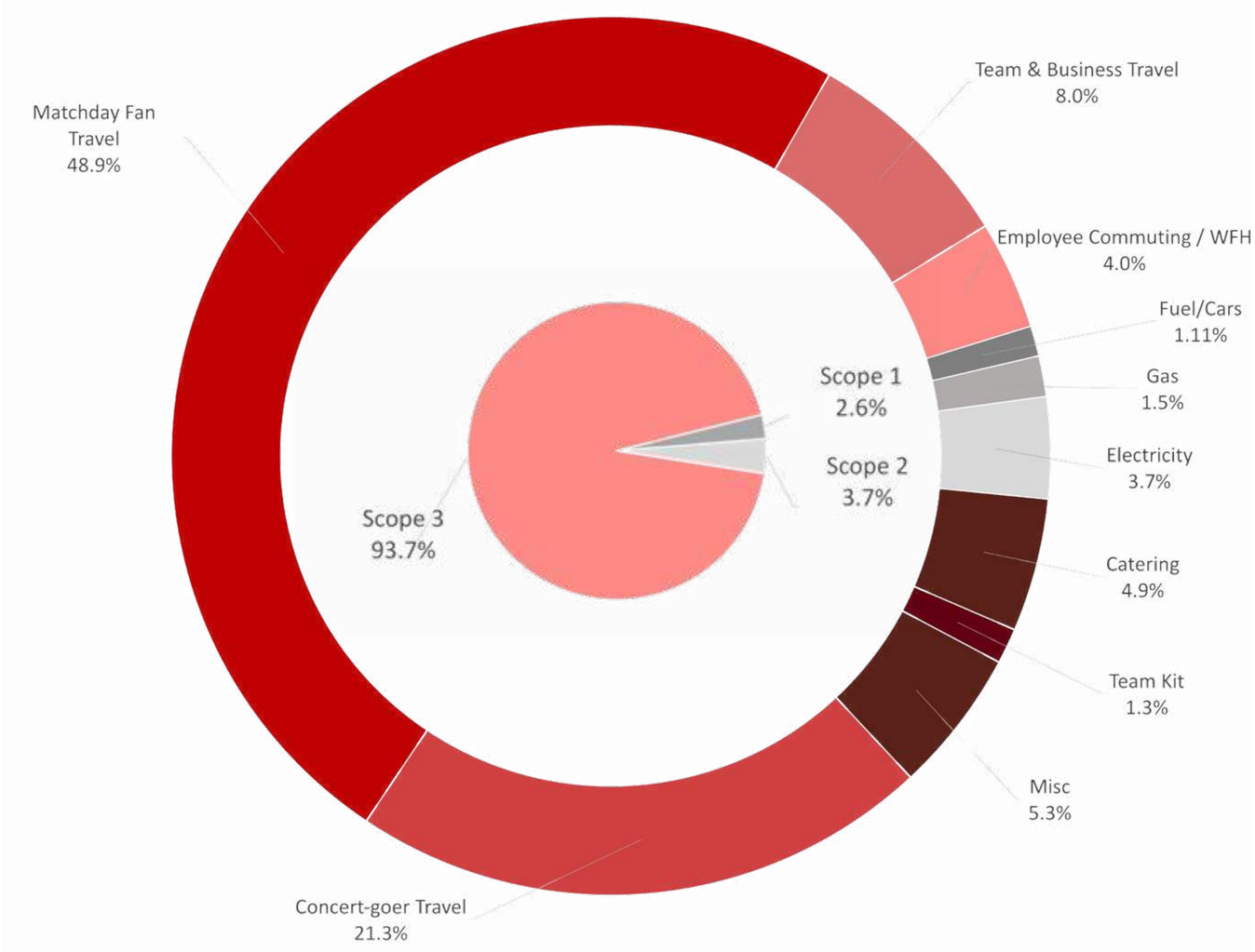
tCO2e = tonnes of 'carbon dioxide equivalent'
= standard unit for greenhouse gas emissions

DEFINITIONS OF SCOPES 1, 2, 3

Scope 1 - Direct emissions from fuels (e.g. gas for heating, diesel for vans and generators)

Scope 2 - Indirect emissions from energy use e.g. purchased electricity for buildings

Scope 3 - Indirect emissions from our activities and events e.g. team, staff & fan travel, catering



INCLUSIONS:

Electricity shown is location-based from average all island fuel grid mix (emissions the club is responsible for physically putting into the air) = 215tCO2e

We also measure our market-based electricity emissions (which we are responsible for through our purchasing decisions) = 38tCO2e. We purchase our electricity from Pinergy, our energy partner.

Fan Travel - We take a stadium perspective which includes estimated travel of both home and away fans at Munster home matches and concerts (based on attendances, fan surveys and ticketing data.)

Well-to-tank (WTT) emissions have been included this season which account for the environmental impact from fuel extraction to its refinement and delivery into tanks/ vehicles. 1144tCO2e

Misc includes: Waste, Water, Grounds Maintenance, Consumables, Grid losses, Electronics/IT, Digital (partial), WTT of Scope 1s.

EXCLUSIONS:

Due to a lack of available data these categories were not included in 22/23 season measurements:

Merchandising
Digital (partial) - streaming, website

MONITORING OUR CARBON EMISSIONS REDUCTION PLAN

	Material category emissions in tCO2e	BASELINE SEASON 19/20	SEASON 21/22	SEASON 22/23	PROGRESS V. BASELINE	REASON	ACTIONS TO 2030
Scope 1	Fuel / Cars	254	207	77	-70%	Electrifying car fleet	Vehicle fleet to fully electric; Electric charging infrastructure; Generators to HVO; Reduce generator use
Scope 1	Gas	99	91	103	+4%	Similar	Switch heating systems to electric; new buildings on electric only
Scope 2	Electricity	218	200	257	+15%	Electrifying car fleet	Solar panels; Increased efficiency; Behavioural change to reduce consumption
Scope 3	Fan Travel *	3475	4,402	3,940	+13%*	Number of events & attendances	Facilitate & promote buses, trains and active travel to events; Encourage car-sharing; Raise awareness; Transport operator, council & gov dept engagement
Scope 3	Employee Commuting & WFH	256	214	219	-14%	WFH policy	Work from Home (WFH) / Hybrid working; Smarter Travel Workplaces - NTA; Increase carsharing; Promote active travel & public transport
Scope 3	Team & Business Travel	205	209	446	+117%	Men's team went further in competition, more emissions. More staff travel added to category for completeness.	Bus/train where possible; More sustainable hotel options; Engage URC and EPCR on tournament travel; Chargers for staff EVs
Scope 3	Catering	315	322	338	+7%	Similar	More plant-based options and local sourcing; Water refill stations; Supporter & player engagement;
Scope 3	Team Kit	207	87	90	-56%**	**Kit ordered in 2 year rotation. Actual impact needs to be reviewed over multiple years.	Supplier engagement; More recycled and renewable material options and extending the life of products.

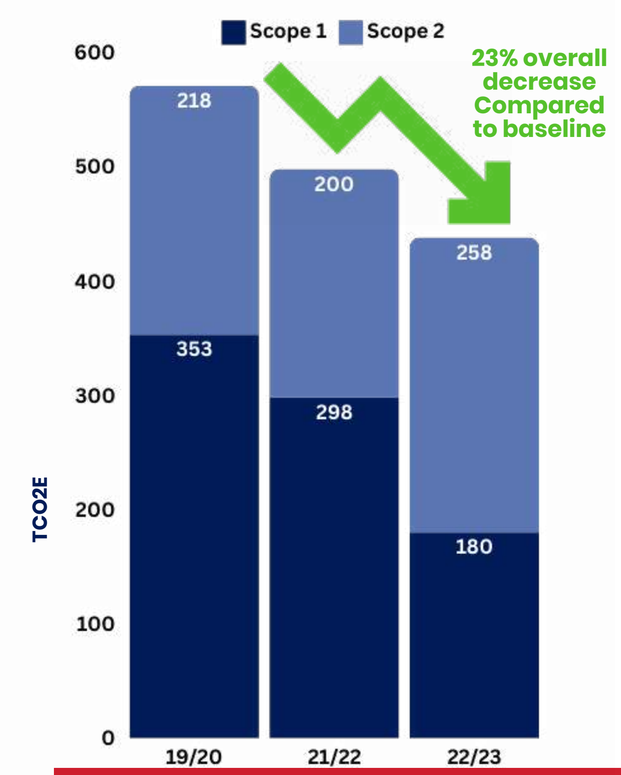
TARGET: 50% reduction in operational emissions by 2030

**50% reduction targets are against 19/20 baseline, for all categories except fan travel which is to be determined.*

**Well-to-tank emissions have now been added to overall footprint and associated categories, but are not included within categories here for comparison purposes.*

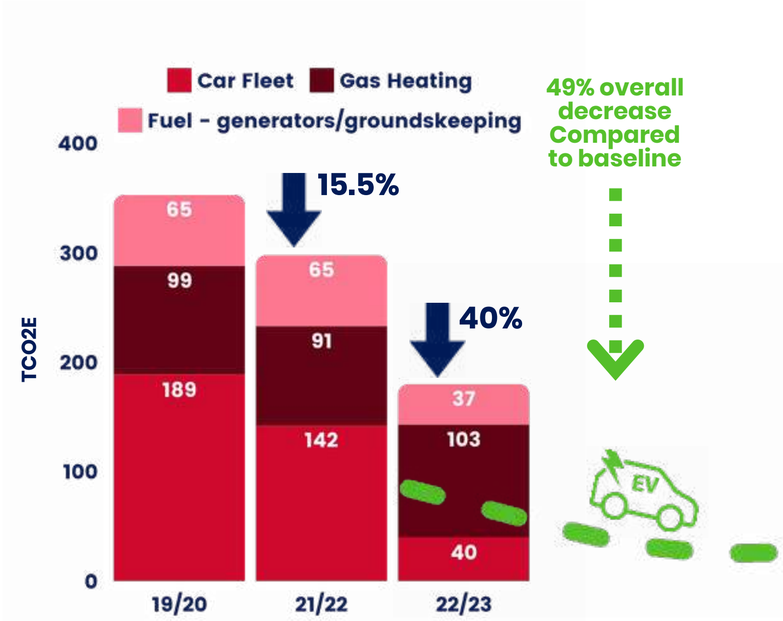
Our Climate Transition Action Plan can be found under "The Club" dropdown on our website.

CONVERTING OUR ACTIONS INTO SCORES: OUR SCOPE 1 & 2 PROGRESS



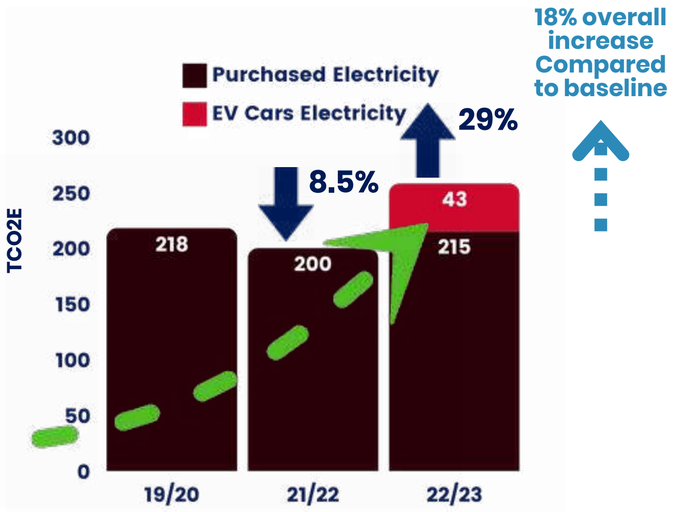
SCOPE 1 & 2 COMBINED
EMISSIONS TRACKING

We are starting to see the progress of our actions to shift away from fossil fuels in-house coming through in the data capture of our operational carbon footprint. Combined Scope 1 and 2 emissions are down 12% on the previous season and **down 23% overall against the baseline or 133tCO2e.**



SCOPE 1
EMISSIONS TRACKING

Scope 1 emissions are down 40% versus the previous season and **down 49% compared to our baseline.** This is as a direct result of switching 77% of our car fleet to fully electric, saving 149tCO2e of scope 1 emissions, whilst transitioning 43tCO2e into Scope 2 as electricity which powers our EVs. Reducing diesel generator use has saved a further 28tCO2e.



SCOPE 2
EMISSIONS TRACKING

Scope 2 emissions are up 29% on the previous season and **up 18% compared to our baseline.** This was as expected, as we shift from petrol and diesel to electricity for our car fleet. Our other electricity usage is generally holding steady. Overall electricity use is therefore up 9%, however we hope to see some reductions from the month our solar panels were switched on this year, and as the Irish national grid decarbonises further. Electricity emissions shown here are location-based on Ireland's all island fuel mix.

**Note: the 2020/21 season was not measured due to the impacts of COVID-19 on Munster's operations and events. That season had much lower activity than normal due to no or restricted attendances at events, and would not reflect our typical emissions activity.*

THE HARD YARDS: OUR SCOPE 3 EMISSIONS

UPS AND DOWNS

From day one we have included Scope 3 emissions in our carbon measurements. These are emissions generated by our activities which are not all directly on site - like travel, catering, kit etc. The data hasn't always been easy to source nor the quality we would like but we continue to improve this season-on-season. The sport industry doesn't always fit into standards which are created for the corporate world, and we have found this to be the case with carbon accounting too. The majority of Scope 3 emissions in sport are travel related, but there is yet to be a consensus across the industry on how fan travel in particular should be measured and tracked or how targets should be set.

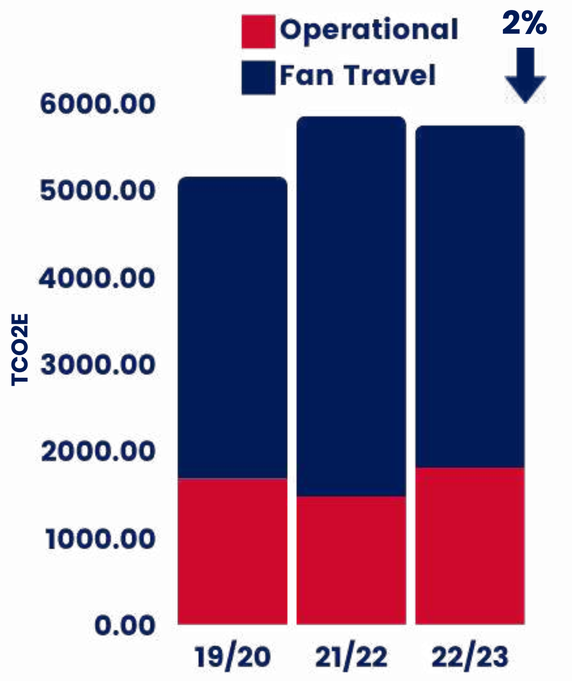
All Munster travel by players and staff on and off the island is included in our footprint, as is their commuting (from home to office/training centre). All Munster and away supporters travelling to our stadiums are included in our footprint.

We have already seen a 14% decrease, or 37 tCO2e, in employee commuting despite a slight increase in employee numbers. This is likely a result of a mixture of improved efficiency in cars since the 2019-2020 baseline year, an increase in car-sharing and the implementation of our work-from-home policy which has been adopted by over 30 staff working 2 days per week at home.

Performance on the pitch is directly related to performance off it. If we go further in competitions, this may lead to more emissions and mean we have to work a little harder to reduce them. Our team travel in 2022-23 increased by 119 tCO2e as a result of winning the URC title, with knockouts away from home and a grand final in South Africa, which contributed to a slight increase in our operational footprint. On the other hand, we only had one home knock-out game en-route to the final to host, which meant less event emissions due to our stadium approach to fan travel emissions reporting, reducing our fan travel emissions on the previous season. Concert travel and attendance figures also affect travel emissions.

Though we're seeing a marginal reduction of 2% in Scope 3 emissions on the previous season, prior to WTT emissions being added, we expect Scope 3 emissions will continue to fluctuate season-on-season and will be dependent on on-field performance, number of events hosted and attendances at matches and concerts. The biggest wins will be made in areas we can control and influence:
fan travel - through shifts in how supporters choose to travel by providing and promoting practical alternatives
staff travel - by reducing car journeys for commuting or business when possible

For other emissions such as food, kit and merchandising, we will need to work closely with our suppliers to come up with solutions together to improve the products on offer.



SCOPE 3
EMISSIONS

***Note: the 2020/21 season was not measured due to the impacts of COVID-19 on Munster's operations and events. That season had much lower activity than normal due to no or restricted attendances at events, and would not reflect our typical emissions activity. WTT emissions are not included in the above for comparison purposes.**

THE HARD YARDS, CONTINUED

FAN TRAVEL DATA - INCLUSIONS AND EXCLUSIONS

We currently take a ‘stadium’ approach, as opposed to a ‘club’ approach to measuring fan travel emissions. This means we include travel emissions to all events we choose to host at our two stadiums which are part of our revenue and which also bring sport and music events to the South-West of Ireland, like concerts, Ireland U20s and Ireland Women’s Six Nations matches. It means we include all fan travel, home and away supporters at our stadiums, including those flying in from overseas. It also means we do not include Munster supporters away travel, as this would be taken into account by the clubs we travel to. This is one of the ways of measuring fan travel, but this may also change, as rugby and sport has not yet defined or agreed upon how to approach this as a collective. This approach currently depends on a lot of assumptions as we base it on geolocations of ticket sales, sustainability and post-match surveys, and match and concert actual attendances. For the moment, we intend to improve our data quality to allow us to design and test more effective solutions. We are already collaborating and networking with other rugby and football clubs, governing bodies, UN Sport for Climate Action initiative, the Sports Positive Summit community, consultants and the Department of Transport to stay up to date in this area. Smaller corporate events at Thomond Park are not yet included due to limited data and much smaller attendances, but we intend to include in the coming seasons.

We’re learning that it isn’t just about reducing our carbon emissions. When it comes to travel it’s about improving the overall match day experience for supporters, less congestion, less parking hassles, better accessibility, and safer journeys. Good quality data helps us to design solutions for fan travel and make the case for sport to tackle this together.

WELL-TO-TANK EMISSIONS

Since travel is such a significant portion of our Scope 3s and overall footprint, we completed an exercise to measure our ‘Well-to-tank’ (WTT) emissions. These are less visible, but equally significant emissions emanating from the extraction, refinement, and transportation of fuel before it even reaches a vehicle’s tank, that account for as much as 20% of travel. These now account for 1144tCO2e of our footprint, and have been added in our overall official reporting figures as Scope 3 emissions. However, we have not yet readjusted the baseline for comparison purposes for these.

By embracing well-to-tank emissions in our carbon accounting practices, we can uncover the full scope of our environmental impact and take meaningful steps to reduce it. We are always moving closer each season towards completeness and higher transparency within our reporting to ensure we are setting a good example in sport.

OVERALL TRENDS & GOALS

Our overall carbon emissions have increased by 12%, from 5,154 tCO2e in the 19/20 baseline season to 5,747.3 tCO2e in the 22/23 season (prior to WTT emissions added). With 1144tCO2e WTT emissions added our total for the 22/23 season is 6,892 tCO2e.

The initial trends developing based on our first three season's emission footprints show:
Scope 1 & 2 combined are reducing
As Scope 1 is reducing, Scope 2 is increasing
Scope 3 is up and down - variable dependent on events
Fan travel is the most difficult category to measure, set targets and track

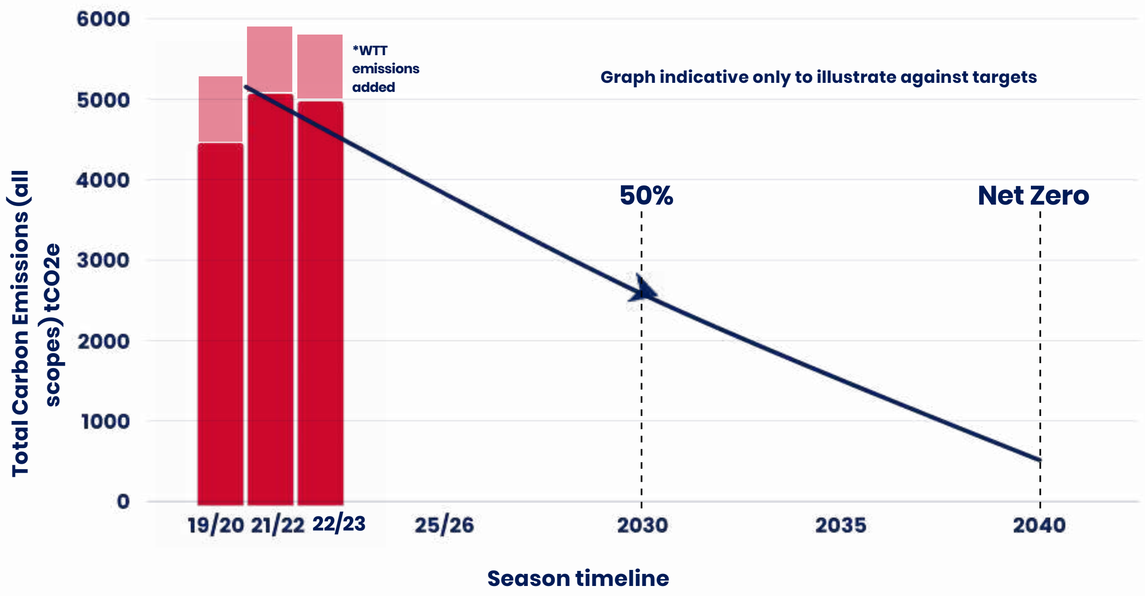
Our progress against targets is unlikely to follow a perfect linear line. There will be ups and downs along the way, especially in Scope 3 emissions, which pose a major challenge both to measure and reduce. As attendances and the number of events we host varies, and as ways to capture data and categories change, so too will our overall emissions.

Measuring actual data and interpreting the results has allowed us to identify what our main emission categories are and provides an overall snapshot of where we are at. This enables us to funnel our efforts and resources into the action areas which will have the most effective impacts.

WHAT IS NET ZERO?

Our overriding goal is to reach net zero emissions. This means to balance the amount of greenhouse gas (GHG) that's produced and the amount that's removed from the atmosphere. When applied to Munster, it means drastically reducing the absolute emissions caused by the club's activities, then investing in projects to remove the amount of carbon equivalent to our unavoidable emissions that are left.

OUR PATHWAY TO NET ZERO



DATA, METHODS AND REPORTING

We follow the **Greenhouse Gas Protocol** for our carbon emissions accounting, as recommended under the UN Sports for Climate Action Framework. The Greenhouse Gas Protocol Corporate Accounting and Reporting Standard (GHG Protocol) serves as the methodological basis for the analysis.

We take most of our emissions factors and methodology from the UK's **DEFRA** database, along with **SEAI** for electricity and gas and **ICAO** for air travel. Emission factors are multiplied by our activity data for each category (both primary and secondary) to convert into tCO2e.

Each year in October, we submit our carbon emissions, including Scopes 1, 2 and 3, as part of our climate reporting via the **UN Sports for Climate Action** portal, as a mandatory requirement to retain our signatory status. We also submit this reporting as a UN Global Compact participant. We publish the information to our website (via this report).

The way we report will continue to evolve each year in line with the changing reporting landscape.

OUR NUMBERS ARE CHANGING SEASON-ON-SEASON

As we expected each year, as we improve our data collection system, reduce assumptions, adopt new methods of measurement and add new categories and sub categories for completeness our numbers change. We will need to change our accounting boundaries, and re-adjust our baseline or previous season's emissions, or add and remove categories as more primary data becomes available. All this will mean our numbers will certainly keep changing and explaining our progress won't always be straightforward. This is part of the journey. We will publish our up-to-date environmental assessment each season with a narrative, explaining our achievements and challenges along the way. We don't think it fair to ask others to follow us without firstly being transparent about where we are at and what to expect.

By completing our calculations in-house, we have developed a clear understanding of where our emissions originate, identified the need to work closely with our suppliers and partners and increase awareness across the organisation of how to actively reduce emissions in our activities. Most importantly, we can take appropriate actions to target resources efficiently towards improving our performance in each area.

Through initial analysis of our wider environmental impacts, we have identified key focus areas for climate action and reducing pollution, as well as our carbon targets. Priority areas for increasing resource efficiency in operations and matchday events, such as Energy consumption and generation, Waste management (including reduction, reusables and recycling rates), Water consumption. We are currently working closely with our partners and suppliers on solutions in these areas and are developing metrics to track their progress for future reporting. We also realise that we must address our biodiversity impacts and the influence we can have in supporting nature.

We know we need to do more and there are many aspects we have not yet tackled. We will seek external expertise to get third-party verification for our emissions and targets. We will network with other sporting organisations and our partners to learn and apply both best practise and new innovations from the sport + sustainability sector to our operations.

We know it is essential to outline where we are at right now at the start of 2025. We won't always be perfect, but just like our teams on the pitch, it is important to keep striving for improvement each season and sharing our story along the way including any complications and set backs too.

We are one of the first rugby clubs in the world to be this transparent with our emissions data, and we hope to use this data to make decisions which keep us on a high ambition pathway and as a leader in environmental sustainability in world rugby.

DEFEND

AGAINST THE IMPACTS

CLIMATE ADAPTATION

ADAPTING OUR FACILITIES FOR OUR CHANGING CLIMATE

Prior to 2019, we were experiencing increased difficulties with pitch management and recovery times due primarily to increasingly wet conditions. This affected our ability to host matches and to allow our local communities, clubs and schools to use our facilities. Significant financial investment and advancements in pitch technology have allowed us to prepare for the future. We are well on our way to building a climate-resilient ecosystem of multi-purpose sport facilities across our province. We want to provide facilities for grassroots rugby and other activities crucial to our local communities' wellbeing.

More durable pitch surfaces at both stadiums allows us to more easily bring world-class concerts to local audiences in the West and South of Ireland, ultimately reducing travel emissions of locals needing to otherwise travel to Dublin or overseas venues to have these experiences. In the bigger picture, our economic assessments have shown that concerts bring economic benefits to both the Cork and Limerick regions and to local businesses who benefit from increased footfall in our cities.

Thinking in systems and longer term across the province, the environmental, social and economic pillars of sustainability are considered as part of all growth, development and decision-making at Munster Rugby, to secure our club's future and the needs of our local communities, and to contribute to national targets in a constructive way.

Virgin Media Park is a municipal stadium and supports both community events and world class international tournaments such as the International Mixed Ability World Cup in 2022, and Ireland U20s and Ireland Women's Six Nations.

In 2018, a modified 3G pitch surface was installed at Virgin Media Park in Cork, following the addition of a 3500-seater West Stand along with a cover for the East terrace in 2015. The state-of-the-art pitch has allowed for a significant increase in games played across a number of sports and disciplines at the venue. Along with a huge increase in the number of grassroots rugby games played on the pitch, a diverse range of activities are also taking place at the multi-purpose venue, from frisbee tournaments to yoga classes supporting local community groups in their health, wellness and recreational activities.

In 2022, following 14 years of continuous maintenance, our pitch at Thomond Park was upgraded with reinforced turf technology, to a hybrid pitch with improved drainage. This allows the grass to recover faster - giving the balance of a world class professional rugby surface with the ability to hold more events in very wet weather and quicker recovery times after non match events.

Our new Centre of Excellence at Virgin Media Park in Cork is set to open in 2025. It includes a world-class indoor rugby dome for a training pitch and a large gym all targeted to grow the game and increase participation numbers across all genders, age groups, abilities and local communities.

The indoor playing area will be the first of its kind in the region and while it will be fully lit for use after dark, it will have a transparent roof to maximise natural lighting. The day-to-day activities at the Centre including Munster's new head office will also be powered by solar panels already installed on the roof of the stadium.

This is our second largest capital project ever, at an investment of €7.3m, partly funded by the Large Scale Sports Infrastructure Fund (€2.7m) and with a contribution from the IRFU. This will be a game changer for developing rugby in the province, with more exciting investments and facilities already being worked on. Phase by phase we're preparing for a climate-resilient future where our diverse, inclusive and healthy communities are thriving, and an exciting pathway into the professional game is accessible to all.

PLAYING TO THE CONDITIONS

Defending against the impacts also means adapting our operations, events and activities to the changing weather, even how we play the game of rugby.

In our corner of Ireland, exposed to the power of the Atlantic Ocean, we may feel we are somewhat accustomed to wet weather. But now, even the rainfall is weirder - heavier, more erratic, less predictable. Longer periods with no rain, and then full-on torrential rain so heavy that its even hard to see in front of you, not to mind play rugby.

On 5th October 2024, our Munster versus Ospreys match at Virgin Media Park in Cork was close to being a wash out. The teams and supporters braved it out in a Status Orange weather warning for significant rainfall. And though we came away with the win, it sapped the enjoyment from the game - whether watching, playing or organising. Supporters were running for cover. Staff and event staff had their hands full keeping the event safe and operational. Media struggled to capture decent images through the driving rain. Some supporters were stuck on flooded roads with extra traffic delays and congestion. Players had trained for the forecasted conditions, but it still wasn't a night for kicking or a particularly enjoyable game of rugby.

Running top-class events, playing the type of rugby we want to play, participating in Munster's world famous atmosphere - everything becomes harder with a changing climate. Whilst withstanding the occasional day of bad weather it not a major issue for us, we don't want more and more days like this - which is exactly what science is now telling us. Worsening weather across the rugby season will increasingly impact operations and events, lead to dangerous travelling conditions, surface water and potentially flooding. We want to keep our people safe, we want to keep our rugby enjoyable.

TEAM WORK: Jack Crowley and Craig Casey battling through a challenging night for kickers in the driving wind and rain. Munster v Ospreys, Oct 5th 2024.

On the same day, the appalling weather conditions hampered domestic competition such as Cork Constitution versus Young Munster at Temple Hill in Cork.

However, it was local communities in our province who bore the brunt of the damage that weekend. The town of Bantry in Co. Cork, at high-risk of flooding, was once again subjected to 65mm of rain over a 12-hour period, flooding many businesses on the main street. Local sports clubs, property, farmland and roads across the region experienced surface water flooding.

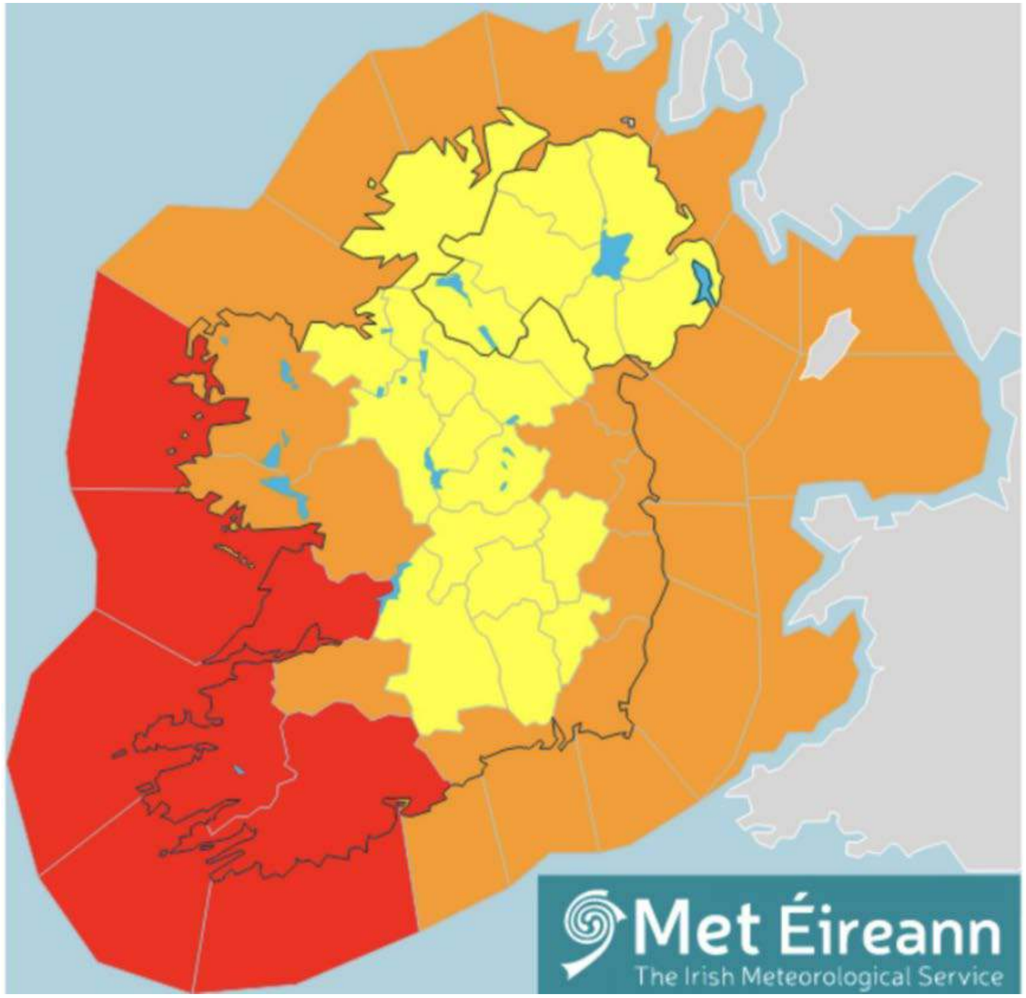
The impacts from climate change will not be equal - it is those more vulnerable to the risks, our grassroots and local communities, who will be the worse affected. This was only one storm. There are many more on the way, increasing in intensity fuelled by fossil-fuel driven climate change.

Overseas, it will be those in poorer parts of the world, those who have contributed the least to the problem who will suffer the most.

This will always motivate us to act. Munster is rooted in community. We feel this sense of responsibility keenly - to protect those vulnerable in society, to set our kids up for a brighter future and hand onto them a better world than we have now.

Bantry was one of the worst affected areas with a number of shops flooded on Main Street and New Street at the weekend. Picture: Andy Gibson

Source: Irish Times



Our **Atlantic Ocean** and its circulation current has shaped our land and our culture for centuries and will always continue to do so. It helps to create Ireland's iconic green landscapes by keeping our climate temperate. That meant we haven't had to deal with frequent extremes of weather, as it was relatively mild, with consistent rainfall. That is now changing. The Atlantic is heating up due to global warming driven by the burning of fossil fuels. The warmer surface water leads to more evaporation. More water vapour, means the clouds carry more water and when that cloud hits land - i.e. the province of Munster, it dumps it down hard and in a shorter space of time, much heavier than we're used to. Even though Ireland is not heating up as fast as continental Europe, we are very exposed to the Atlantic Ocean and all that it will throw at us.

PREPARING FOR THE ONSLAUGHT

Our supporters paint the town with a sea of red wherever we go. We're normally very fond of the colour red, but we've found one exception. Red weather warnings are the highest level weather warnings in Ireland, issued by Met Éireann, the Irish Meteorological Service.

It is often Munster's counties, which are on the frontlines of these rainfall and wind warnings. Orange and yellow status warnings can still bring very serious localised flooding to towns and villages, as Storm Babet and Storm Bert showed.

This season, Storm Darragh with a Status Red Warning for some counties hit hard the night before our EPCR game versus Stade Francais in December. Millions of people were warned to stay indoors across Ireland and the UK. Many of our supporters were some of the almost 400,000 homes, farms, and businesses without power across the country. The storm carried onward to the UK, causing loss of life, wide-spread disruption and damaging the port of Holyhead, a vital link for Ireland's import-export trade and ferry passengers with the UK.
In January, Storm Éowyn broke all sorts of records, and triggered an unprecedented whole island of Ireland Status Red warning. The storm left almost 1 million people without power,100,000s without water and broadband, and a significant clean-up operation ongoing at the time of writing. Many homes, businesses and sport clubs were damaged.

These extreme weather events can cause risk to life, significant damage to property, power cuts and flooding. At a minimum, they cause disruption to people's lives in communities. Schools shut, bus and train services cancelled, businesses disrupted, farms dealing with saturated ground and sporting fixtures called off. While we can deal with the occasional storm or rainfall event, climate change means these are intensifying, and we will need to adapt more quickly to what is coming at us. Weather warnings from Met Éireann are an important part of our climate adaptation toolkit. They have proven effective in giving people enough time to take necessary action – to save lives by sheltering in place, to protect animals and property by preparing ahead of time, and to adjust operations to reduce disruption as much as possible.

Though flood defences will help in localised areas, they are not a cure for all flooding risk.
We will need Climate Aware Communities who help each other, and build resilience across the province. We will also need to attack the emissions together as a collective, which will be the only way to tackle the root cause.

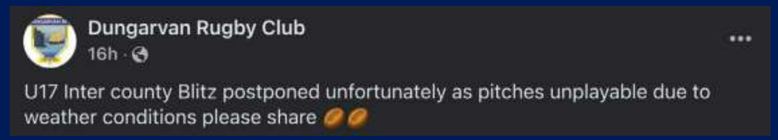
The science is clear that we can still turn all this around. It is possible that within the lifetime of kids alive today, that they will get to experience our climate restabilise again, and secure a safe future for their kids. We have possession now and we're still playing with advantage, but this is time-sensitive, it will not last forever. If we don't use it, we lose it.

IMPACTS ON GRASSROOTS RUGBY

Messages of cancellations and postponements sent out on social media across a rugby season are becoming all too common now for our clubs due to extreme weather and saturated ground conditions. The safety of players, coaches, families and volunteers is always paramount. This appears to be escalating further in the 2023-24 and start of 2024-25 seasons due to extended periods of rainfall and extreme rainfall events. This impacts across minis, age-grade and senior level fixtures and training sessions in clubs across the province, and can have a knock-on effect to overall participation levels. There are also increased difficulties for volunteers who organise rugby at grassroots level as well as weather causing difficult travelling conditions through increased surface water and poor visibility.

The impacts are also not equal. Some parts of the province will be hit harder by extreme weather. Some are more exposed to flood risk with rivers nearby. Some clubs are larger and have enhanced facilities or are more prepared than others. Younger age-grades are often impacted more than senior level as pitch surfaces are prioritised for certain fixtures.

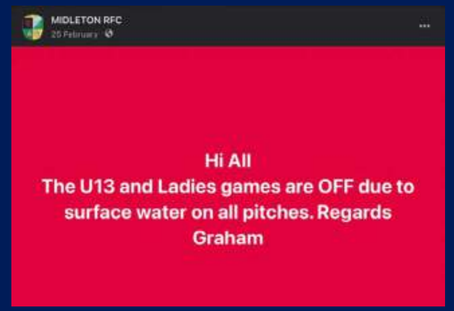
Research is required to assess exactly how this is affecting rugby across the province with knock-on effects due to lost time and potential damage to club facilities and pitches in flooding and storms. We hope to bring about and collaborate on research projects with the IRFU and Irish universities on this crucial gap in knowledge to help protect our communities and the places we play.

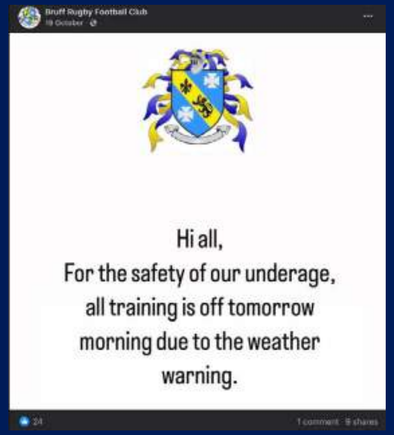


CLIMATE AWARE RUGBY COMMUNITIES

Munster will support and nurture our rugby clubs across the province as they adapt to our changing weather patterns season-on-season. Many will need support in developing suitable fit-for-purpose climate-resilient facilities, adequate resourcing, sustainability strategies, up-to-date information and timely communications. We know this will take a lot of hard work, collaboration and commitment, but we also know just how capable and committed our communities already are. We will use our influence to shine a light on the needs and abilities of our communities with the IRFU, Sport Ireland, councils and various government departments.

We must all take this climate action together, connected as a province, as we develop the game of rugby in the best possible way, setting up our young people up for a future full of opportunity.





AMPLIFYING COMMUNITY RESILIENCE

Over the course of the last two years there has been signficant flooding in our local communities across the province. Some of the most extreme weather was experienced in the small town of Midleton and areas of East Cork during Storm Babet in October 2023. The severe floods were described by locals as the 'worst in living memory'.

A World Attribution Study later showed that the rainfall event more than doubled in likelihood and increased in intensity by around 13% due to human-caused climate change. At least 400 homes and 300 businesses were flooded with damage totalling roughly €200 million in the event. Had the high river levels not coincided with low tide, drainage into the harbour would have been much less effective, and the flooding would likely have been more severe.

The community of Midleton subsequently showed incredible community spirit to getting their town, homes and businesses back on their feet again.

Source: Irish Examiner Picture: Eddie O'Hare

Source: Irish Examiner Picture: Larry Cummins

Rugby players and other volunteers from Midleton RFC helped residents in their town with the recovery effort and played a fundraiser match versus Clogher Valley to help.

Source: Midleton RFC Facebook page

"The response since the flooding devastated the town shows that community spirit in Midleton is not only alive and well, it is getting stronger. It has brought us back together in a way that we could never have anticipated."

Councillor Danielle Twomey

We want to shine a light, not just on the impacts and issues, but on the incredible resilience within our communities to rise up and help each other in times of need. The community spirit within our local communities, our rugby clubs and other sports clubs across the province is a monumental force.

At Munster, we are one province. All communities and sports clubs can help each other. We will need to band together and help each other, this is part of building our resilience to withstand the impacts.

Sport has the power to lead this movement and bring people together in solidarity with others in times of need. Our communities are already strong and show hope, defiance, and togetherness even in the face of adversity.

AMPLIFYING COMMUNITY RESILIENCE

Days after celebrating a county final win, in the depths of Storm Babet in October 2023, club officials at **Fr Sarsfields GAA** club took the brave decision to open their floodgates and sacrifice their pitch as a flood plain to minimise damage to a housing estate across the road.

"We won a county, lost a pitch but hopefully saved a part of the Glanmire community."

Their club facilities were extensively damaged by the floods. Local people and businesses around Cork rallied to help the club get back on its feet. They took up offers from other clubs' pitches and gyms to allow the club to stay operational.

Just one year on, they opened a new pitch, built back stronger than ever and won a Munster club hurling championship. In January 2025, they made it all the way to Croke Park to the All-Ireland Club Senior Hurling Final, the first time in their history.

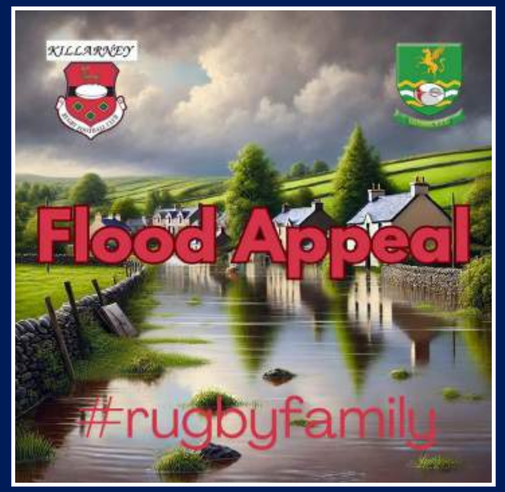
Source: Sarsfields hurling Club Facebook page

In Abbeyfeale, County Limerick, volunteers were out in force as the local GAA club and soccer club were damaged in severe flooding after the River Feale burst its banks during Storm Bert in November 2024. Farmers and other volunteers also helped to protect homes and move people away from the rising waters.

Image: Volunteers at **Fr Casey's GAA** *clubhouse*

"After the flood, it made everyone come closer again. It's such a close-knit community, not just the club, just everyone in general, people who are directly or indirectly involved. Everyone is behind us now as a club, players and management. It's been an incredible journey."

Sars, Source: Irish Examiner



In the aftermath of Storm Bert in November 2024, Killarney RFC stood in solidarity with Listowel RFC by running an appeal for donations of kids clothing, bed linen and cleaning products to help families in immediate need in the neighbouring Kerry town of Listowel impacted by severe flooding.

Source: Killarney RFC Instagram

#MunsterStartsHere

As we adapt to the impacts of climate change in our province, our greatest strength will always be our own people in our own communities. We will need to stand up and fight in solidarity with each other more than ever before. This will in turn make us even stronger.

KEEPING OUR EYE ON THE BALL

Facing compounding and intertwined global challenges like climate change, biodiversity loss, inequality and conflict can make us feel disorientated. Sometimes we can feel a crippling sense of powerlessness and isolation when we turn on the tv and see terrible disasters playing out all over the world. Often, we don't even know where to start with meaningful action even if we had the bandwidth to do so, and aren't always sure how it relates to our lives or to rugby.

OUR OWN LEARNING

Keeping our eye on the ball in sustainability, means constantly learning.

As in rugby, we cannot always stay the same. We must continue to learn, to grow, to adapt, to change, to find new ways of doing things. Getting our heads in the game is just as critical to performance as being physically prepared, maybe even more so.

A huge element of implementing our climate gameplan is learning new ways of doing things, asking questions, being open to taking chances and adopting new perspectives. It can start with the smallest but sometimes most impactful action, having conversations.

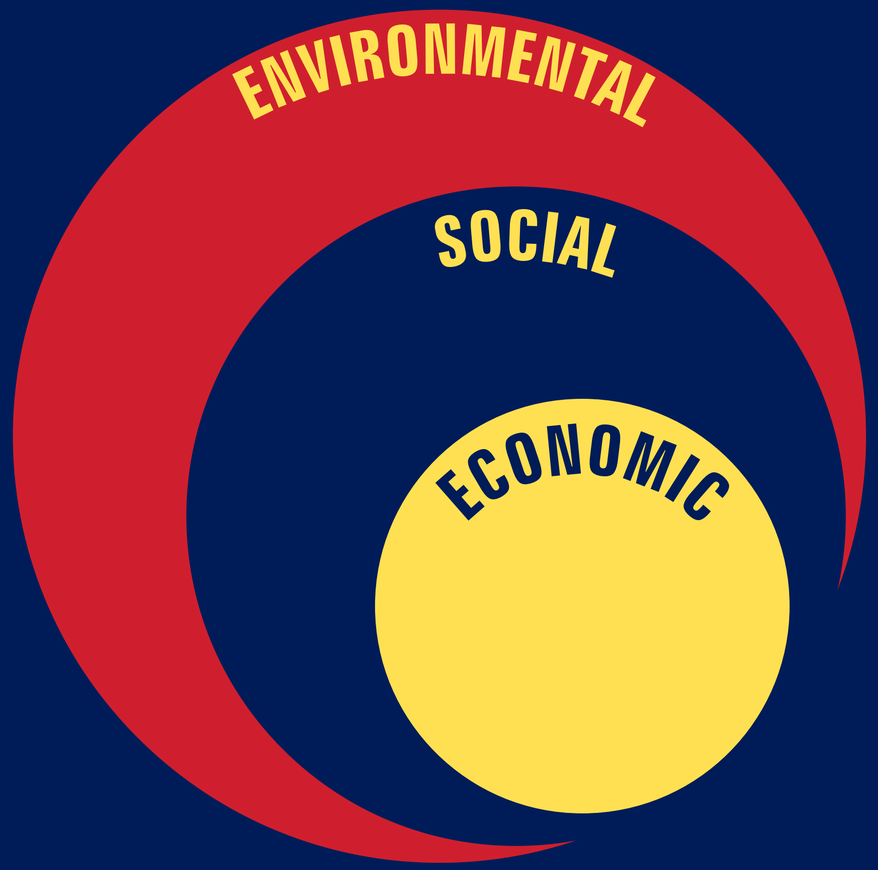
Getting into a growth mindset can be difficult, but is a key part of sport, and everyone can do this. Adopting a growth and learning mindset is key to each individual unlocking their contribution to the things that really matter to them and doing it in their own unique way.

Sustainability isn't confined to classrooms, powerpoint presentations or reports. It's about applying ideas, experimenting, and adapting to new challenges in real time. It's this unique combination of learning, lived experience and perspective that enables us to put our best foot forward.

We cannot do everything all at once. We must break it down into bite-sized chunks, so we don't get overwhelmed, so we can keep the show on the road, so we can bring people along and ensure participation at all levels of the club. It doesn't mean business-as-usual or incremental change, it means transformation in a manageable way.

We're learning too that climate action is not only vital for the future of the planet, but for us as a sport's organisation. We want to acquire and retain the best talent, gain a competitive advantage and adapt to increasing disruption.

Our learning helps us to feel more grounded and more aware of what's going on around us. Our awareness leads us further into action and when we take action, we feel better - a sense of agency. That our actions really can make a difference, especially when we do them as a collective.



Key to understanding sustainability has been embracing how interdependent our world is. Only with a healthy environment can we have living conditions for a cohesive society. Without society, we cannot have a thriving economy. Without all three in balance and working in harmony together, Munster Rugby and all our people cannot reach our full potential or carve out a bright future for our kids.

We realise we don't have everything connected up yet into a cohesive joined-up strategy, and we still have gaps in our actions, in our knowledge. But this is also part of our journey. We're having tricky conversations behind the scenes, we're experimenting with action and we're sharing our journey.

We are also learning that much of the work we already do in rugby contributes to sustainability too, especially our social and community impact.

INVESTING IN OUR OWN LEARNING:

These training modules will be rolled out during the 24/25 season for all Munster staff and players:

Climate and Sustainability Training

'Our Climate, Rugby and You: Connecting the Dots' module is climate literacy e-learning designed specifically in-house for Munster staff and players to further their learning journey on a complex topic. It breaks down science into simpler rugby language, makes it more relatable and local, whilst also putting it into a much broader context. Looking at the planetary boundaries and the Sustainable Development Goals which take a wider lens, and help us to connect things up.

It is designed to build a learner's confidence for their own sustainability journey as we take action as individuals and as a club. Understanding the bigger picture, how it impacts rugby and crucially how rugby can use its influence to make its greatest positive contribution.

Diversity and Inclusion Training

Diversity and Inclusion is vital at Munster as we embrace our differences and appreciate staff, players and volunteers come from different backgrounds. Despite our unique characteristics and personalities, we all work together to achieve the same goal. D+I training helps create a respectful and collaborative environment and reminds us that diverse organisations benefit from varied experiences and backgrounds.

WIDER COLLABORATION

We are constantly inspired by others, and our learning often comes from others. We would like to mention our fellow rugby trailblazers - Bristol Bears, Northampton Saints, the Dragons and others who have inspired us on our journey. While we compete against each other in competition, we know that sustainability goes beyond rivalry. We can encourage each other off the pitch, as we share these challenges and make gains together. We want the entire rugby family as a collective to remain strong, so we can continue our exciting rivalries on the pitch long into the future.

In Ireland, the GAA has been generous in sharing their knowledge and lessons learnt with us, particularly their work at Croke Park stadium and the Green Clubs Programme.

We are happy to share our own learnings too as we know it is helpful to others and can inspire others. In 2023, our COO presented Munster's climate action approach to the Cork Education and Training Board.

At Sport Positive Summit, an annual conference on sport + sustainability in London, we learn from football, sailing, formula E, tennis, and a range of other sports, sporting organisations and professionals who work in this unique area. Munster actively contributes to this global sport conversation and collaborates on new ideas to keep up to speed.

As a signatory to the UN Sport for Climate Action Framework, we also input into strategy and plans at global levels. Participating in surveys, workshops, webinars, and providing feedback on how sport as a collective can take this challenge on. Sport can work together to show the world what true collaboration really means. Using its influence across communities, across sports to reach billions of people around the globe who follow sport.

Munster is built on relationships, and we want to work with, learn from and help others along the way. We can each contribute to raising the standards across our sport, so sport as a whole becomes an essential vehicle for delivering social and environmental impact which the world needs.

Munster Rugby featured in two significant global rugby research reports as a club leading by example for our sustainability work.

The first 'Future of Rugby' report was released before the 2023 Rugby World Cup in France, by the University of Bath and Mastercard.

The second, World Rugby's 'Rugby and Climate Change' Report was released in June 2024. The report also asks rugby organisations to promote and support climate change adaptation and mitigation measures at a local level, a necessary step to equip everyone involved in the game and enhance their resilience.

Munster is already recognised as a rugby club which is leading the way by governing bodies, other teams and other sports, but there is so much more we want to achieve. We're really only getting started and we'll need a lot of help along the way.

In October 2024, Thomond Park took part in air quality testing for nitrogen dioxide (NO2) levels as part of the Clean Air Together (Limerick City) campaign with the Environmental Protection Agency (EPA), raising awareness and amplifying action. A map of air quality in Limerick will now be created and we will review these results as part of our ambition to improve traffic congestion in the Hassett's Cross / Thomond Park area, for local residents, supporters and our local school and university communities on match days. Scientific data is important to us, as it helps us to make decisions and highlight issues based on real evidence.

A GLIMPSE INTO OUR COMMUNITY AND SOCIAL IMPACT

OUR PATRONS PROGRAMME

The Munster Patrons Future Programme was established in 2014 by Doug Howlett as an altruistic ask donation to support the Academy, Community Rugby and Women's Rugby Programmes.

A key element is that these funds are specifically not used to fund the Professional Game. Donncha O'Callaghan is the current programme ambassador. Partnering with our Patrons allows us to deliver long-term participation, inclusion, fun and learning in our communities.

Our Community Patrons support our team of Community Rugby Officers who are on the ground throughout the province delivering programmes including: coaching courses, blitz events, summer camps, girls skills camps, age-grade talent camps and engaging with Emerging Schools.

As a direct result of our Community Rugby Programme, over 180 national schools, 111 secondary schools, and 67 clubs and communities throughout the province, over 15,000 children and 3,800 adults take part in rugby-related activities each year.

Mixed Ability Rugby is virtually the same as rugby seen at All Ireland League level: it's a 15-a-side, full contact rugby, but with uncontested scrums and a mixture of disabled and non-disabled bodies on the team. There are currently eight teams played Adapted Tag and Mixed Ability Rugby, and two clubs offering rugby for children with additional needs.

OUR NOMINATED CHARITY PROGRAMME: IN ITS 15TH SEASON

In 2010 Munster Rugby established an official structure to actively support nominated charities each season. During the season, we work with the charities helping them raise awareness and generate funds for much-needed resources. Munster Rugby look to support the nominated charities in the following ways:

- Player appearances
- Signed merchandise
- Hospitality box at a URC match in Thomond Park
- Supporting various fundraising activities during the year
- Nominated “Charity Game”
- Official charities of the Munster Rugby Awards

Each year all applications are reviewed over the summer by a committee containing members from the Munster Branch, senior players, team management and Munster Rugby staff representatives.

We have supported over 20 charities since the beginning of the programme, and many more in the previous years. We hope to continue to support charities long into the future. During the 24/25 season we are delighted to partner with Focus Ireland and the Rehab Group.

Rehab Group provides services nationwide to people with disabilities, enabling them to live independent and fulfilled lives. It supports 12,800 children and adults annually through the provision of high-quality care services such as respite, day services and home support, and also provides training, education services and employment skills/opportunities.

Focus Ireland are a nationwide charity that work with people who are experiencing homelessness or who are at risk of losing their homes across Ireland. The organisation provides advice, information, advocacy, housing, and help with finding a home. The number of people who are homeless has surpassed 14,500 in 2024. This includes a record number of 4,419 children and 2,099 families who are currently without a home.

MUNSTER STARTS AND ENDS WITH COMMUNITY

Volunteers are the real superheroes of Munster right across the province. Their time, sacrifice and expertise helps young people with their personal development, leadership and teamwork skills.

Our people in clubs, schools and communities ensure that everyone can participate in our sport and that our initiatives actively focus on mental, physical and social development of our kids.

In the 2023-24 season, 42 Munster clubs had women and girls participating in competition at age grade or adult level. We want to actively further expand and grow the women's game in our communities.

We also support the Cork Hellhounds, a LGBT All-Inclusive Team.

We run many initiatives season-on-season. Examples in recent seasons would be 'Rugby on the Green' a Regeneration and Disadvantaged Areas Integration Programme, and a Visually Impaired Rugby session at the University of Limerick.

As we develop our understanding of sustainability further, we hope to better connect the dots of our community work with how this contributes to the global goals. Over the course of the next year, we hope to map out and understand how our rugby development work contributes, and how could we elevate this impact even more, to bring more social benefits to even more people, as we grow our grassroots game.

#MunsterStartsHere

LEGACY: OUR WHY

MORE THAN A TEAM

Those who have gone before us have allowed us to be where we are today, standing on the shoulders of these legends now we dare to dream. Incredible people have been at the heart of Munster's journey along the way, and they remain with us always, their legacy lives on at the club.

We are the ones here now and we in turn can set others up for the win. We feel it keenly, the responsibility to do it well, to do the right thing. It is this sense of stewardship that drives us. We want to look back and be happy that we gave this our best shot, leading from the front. And that we did it in the right way, by bringing others with us, and allowing everyone to contribute and unleash their own unique superpowers to this challenge.

We want to continue to develop the sport we love in the places we love, and to be a force for delivering positive environmental and social impacts in our local communities, creating this vastly different world we know we need. What we do in the next five to ten years, will determine all our futures.

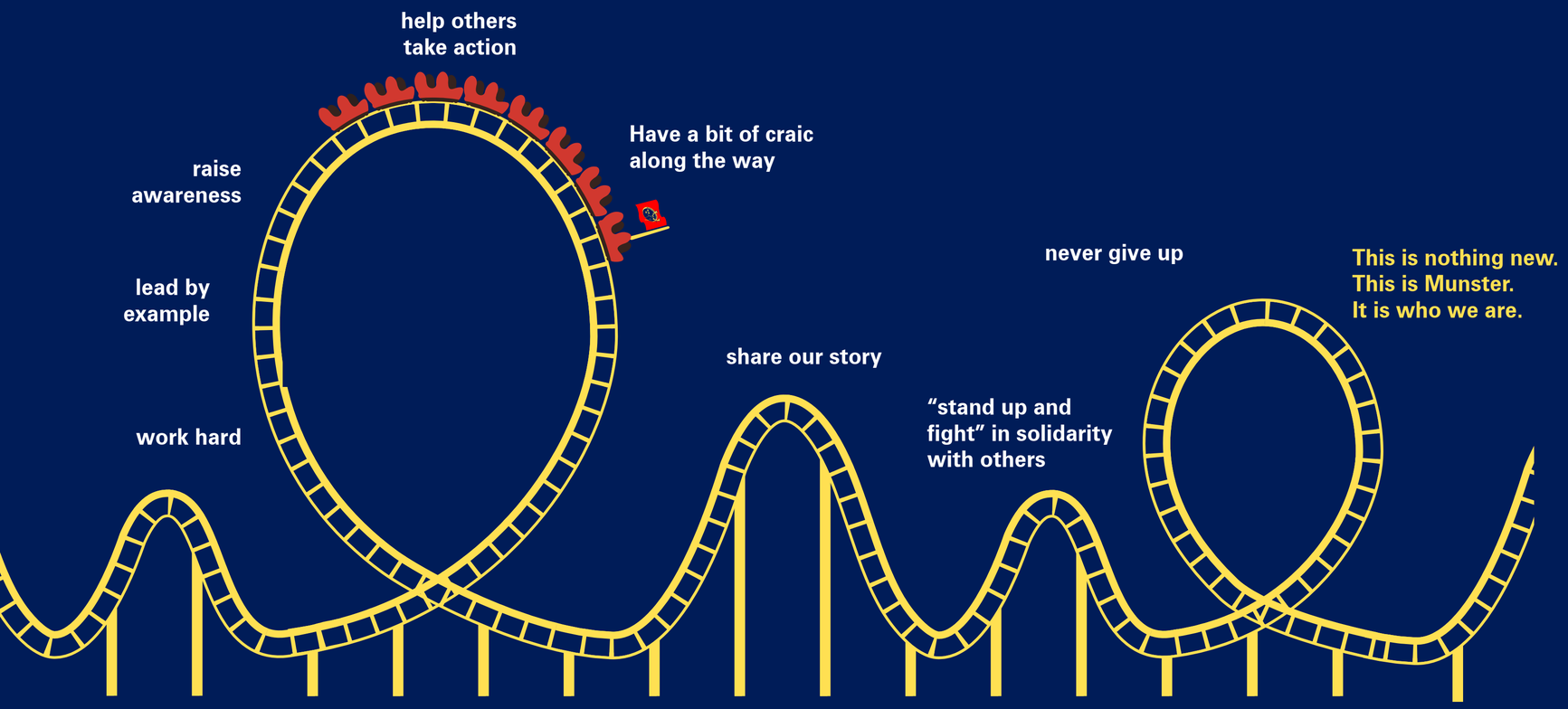
With that little sprinkle of Munster magic, we know we can achieve things that feel hard and that we didn't think possible. We will write this most important next chapter in the club's legacy. Phase by phase, together, we will set our young people up for the win - a bright future, full of possibility where they can follow their passions too, as we have.

It starts right here right now, with us, in this present moment, to give it our best selves, every single day.

Bank of Ireland
adidas

THIS JOURNEY WE'RE ON... IT'S A ROLLERCOASTER. WE WON'T SUGARCOAT IT. THERE WILL BE TWISTS AND TURNS.

This is what we know so far.
We will...



Our actions won't always be perfect, but we believe imperfect action is better than waiting around to see what happens. The stakes are too high.

This isn't about the 'sciencey' complex jargon. We're not really aiming for 'zero'. That doesn't motivate us. We're aiming at maximising our impact, delivering exciting change, creating a 'sea of red' moving together as one, a force to be reckoned with in the global arena, reimagining our future through the power and connection of rugby.

This is about how we show up, together, for each other.

#SUAF

We believe in the power of people.

We believe this last-minute turnaround is possible

... and we'll keep playing our unique part.

Will you? Join us on our rollercoaster.
We would love to hear from you!

This report was winner of "Report of the Year" at the Sport Positive Awards 2025, one of only 12 winners globally. It was recognised for honest storytelling, climate action and resilience in sport.

But the real win is what comes next. We want to listen more, learn more and keep improving together.

What would you like to see next?
We'd love your ideas, advice or inspiration on how we can use our voice, platform and community to make a bigger impact for climate action and sustainability - on and off the pitch, and across our communities.

CLICK HERE
All voices welcome - submissions open again until **31st December 2025**.

To The Brave & Faithful
Nothing Is Impossible