

5 April 2023

ASX RELEASE

2022 Sustainability Report

Atlas Arteria (**ASX:ALX**) today releases its 2022 Sustainability Report, which is attached and can also be viewed at Atlas Arteria's website www.atlasarteria.com.

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This announcement has been authorised for release by Clayton McCormack, General Counsel & Company Secretary.

About Atlas Arteria

Atlas Arteria (ASX:ALX) is a global owner, operator and developer of toll roads, creating value for our investors over the long-term through considered and disciplined management. The roads we own, operate and develop benefit communities through reduced travel time, greater time certainty, reduced fuel consumption and carbon emissions.

Today the Atlas Arteria Group consists of five businesses. We currently own a 31.14% interest in the APRR toll road group in France. Adjacent to the APRR business is the smaller ADELAC business which connects to APRR in south-east France. Together APRR and ADELAC comprise a 2,406km motorway network located in the East and South East of France. In the US, we own a 66.67% interest in the Chicago Skyway, a 12.5km toll road in Chicago and have 100% of the economic interest in the Dulles Greenway, a 22km toll road in the Commonwealth of Virginia. In Germany, we own 100% of the Warnow Tunnel in the north-east city of Rostock.

www.atlasarteria.com

Important Notice:

Investors should note that neither of the Atlas Arteria entities has been, or will be, registered under the U.S. Investment Company Act of 1940, as amended (the "U.S. Investment Company Act"), in reliance on the exception in Section 3(c)(7) from the definition of "investment company". Accordingly, Atlas Arteria securities cannot be held at any time by, or for the account or benefit of, any "U.S. person" (as defined in Rule 902(k) under the U.S. Securities Act of 1933) ("U.S. Person") that is not a "qualified purchaser" (as defined in section 2(a)(51) of the U.S. Investment Company Act and the rules and regulations thereunder) ("Qualified Purchaser" or "QP") at the time of their acquisition. Any U.S. Person that is not a Qualified Purchaser, or any investor acting for the

account or benefit of any U.S. Person that is not a Qualified Purchaser, is an “Excluded U.S. Person” and may not hold Atlas Arteria securities.

For further details of ownership restrictions that apply to residents of the United States and other U.S. Persons that are not Qualified Purchasers, please see our website.

https://atlasarteria.com/stores/_sharedfiles/US_Ownership/AtlasArteria-USownershiprestrictions.pdf



SUSTAINABILITY REPORT 2022



We are Atlas Arteria. We are a global owner, operator and developer of toll roads. We work to create long-term value for our investors through considered and disciplined management and sustainable business practices.

OUR VISION

To provide the communities in which we operate with high quality, well maintained infrastructure and associated amenities that:

- enhance safety;
- provide economic benefits through reduced travel time and greater time certainty;
- enable improved environmental outcomes through reduced fuel consumption and carbon emissions; and
- provide a positive customer experience.

OUR VALUES

Our values guide the decisions we make and the way we behave as we work together towards our vision.

In living our values, we aim to create strong growth for securityholders and better outcomes for our customers, our communities and our people.

To us, great performance is as much about the way we get there as it is about the result. That's why our people's success is evaluated against our five values, along with their role responsibilities.

OUR GUIDING VALUES

When we are steered by these values, we are acting in the best interests of one another, our securityholders, our customers and our communities. In this way, together, we're driving better outcomes.



Safety is at our heart

We are always focused on delivering safe outcomes for our employees, contractors, customers and visitors to our offices and roads; because nothing is so important that we cannot take the time to do it safely.



Transparency in all we do

We are honest about what we do and how we do it. We are accountable for our actions. If we make a mistake, we will be open about it, learn and improve from it.



Engage for better outcomes

We engage with one another and our stakeholders with a spirit of curiosity and with a learning mindset. We seek to understand people's needs so we can deliver better outcomes. We are open and adaptable to change and committed to continuous improvement.



Environmentally and socially responsible

We care for our communities and the environment. We are committed to enhancing our communities and are proactive in reducing environmental impacts by embedding responsible and sustainable business practices.



Respect in every interaction

We are respectful of everyone in every situation. We celebrate diversity. We know that a culture of inclusion and diversity breeds success. We respect the rules and the spirit of the law and will always act ethically, lawfully and responsibly.

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Reporting suite

Atlas Arteria produced a suite of reports for the 2022 year to meet the needs of various stakeholders including the following key documents, all available through <https://www.atlasarteria.com/>.



2022 Sustainability Report (this report)



2022 Annual Report



2022 Results Presentation



2022 Investor Reference Pack



2022 Corporate Governance Statement



Modern Slavery Statement June 2022

ABOUT

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- › From the Chairpersons and CEO
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FROM THE CHAIRPERSONS AND CEO



Debbie Goodin



Fiona Beck



Graeme Bevans

Dear Securityholder,

Welcome to Atlas Arteria's 2022 Sustainability Report, our second such standalone report.

This has been a significant and transformative year for Atlas Arteria, and we are pleased to report on the progress achieved throughout.

At Atlas Arteria, connecting customers and communities and helping to keep economies moving is what we do: but to us, how we do it is just as important. We are committed to building a sustainable business that delivers strong performance for all our stakeholders and creates long-term value.

We remain focused on:

- pursuing safety for our employees and customers;
- connecting communities and commerce, and providing transport options that make life easier;
- fostering inclusive, collaborative and engaging workplaces; and
- actively managing environmental impacts and contributing to a low-carbon future.

It is pleasing to see our efforts to improve our sustainability performance recognised in key ESG benchmarks. This includes the GRESB (Global ESG Benchmark for Real Assets) Infrastructure Public Disclosure Report, where we achieved an A rating in 2022, up from a B in 2021 and D in 2020.

Our focus in 2022

Safety is our top priority. We are therefore deeply saddened by an accident that occurred in April 2022, when three APRR employees were struck by a van. The accident resulted in one fatality and one serious injury, the effects of which have been deeply felt across the business. Support has been provided to the employees' families and to APRR teams as they navigate the impacts of this tragedy. This event underscores the inherent safety risks in our business. We remain steadfastly focused on preventative measures and learnings from this tragedy.

In 2022 we continued to deliver initiatives for improved customer safety and experience. APRR's upgrade of the A79 to motorway standards has vastly improved safety conditions along a particularly accident-prone road. The free-flow tolling technology used along that route delivers both smoother flow of traffic and environmental benefits associated with reduced emissions and resource use.

As a global owner, operator and developer of toll roads across three countries – with concession end dates of up to 2104 – climate change is important to us.

This year, as well as continuing to address our emissions profile, we have worked to better understand potential climate-related impacts to our infrastructure, our people and to our customers and communities. The work represents a significant step forward in aligning our climate actions and reporting to the Taskforce on Climate-related Financial Disclosures (TCFD) recommendations. This was the first year of a three-year roadmap, over which time we will further embed climate change considerations into our business processes.

Our people are integral to the success of our business. We are pleased to have maintained our 40% gender balance at Board level and across senior executives¹ and the corporate team, and we report here on actions in pursuit of an inclusive, collaborative and engaged workforce.

Looking forward

Our acquisition in December 2022 of a majority interest in Chicago Skyway has transformed Atlas Arteria into a stronger, larger, more diverse business that remains sharply focused on long-term value creation. Over the coming year, we look forward to working with the team at Chicago Skyway to align and enhance their approach to sustainability.

Our sustainability priority areas will continue to guide our focus. We will embed processes, pursue innovations and remain alive to potential implementation improvements and approaches as we continue on our sustainability journey.

The separation in timing of the Sustainability Report from the Annual Report will continue, allowing us to align our reporting with that of Eiffage, our partner at APRR.

We look forward to reporting on our continued progress next year.

Debbie Goodin, Chair, Atlas Arteria Limited

Fiona Beck, Chair, Atlas Arteria International Limited

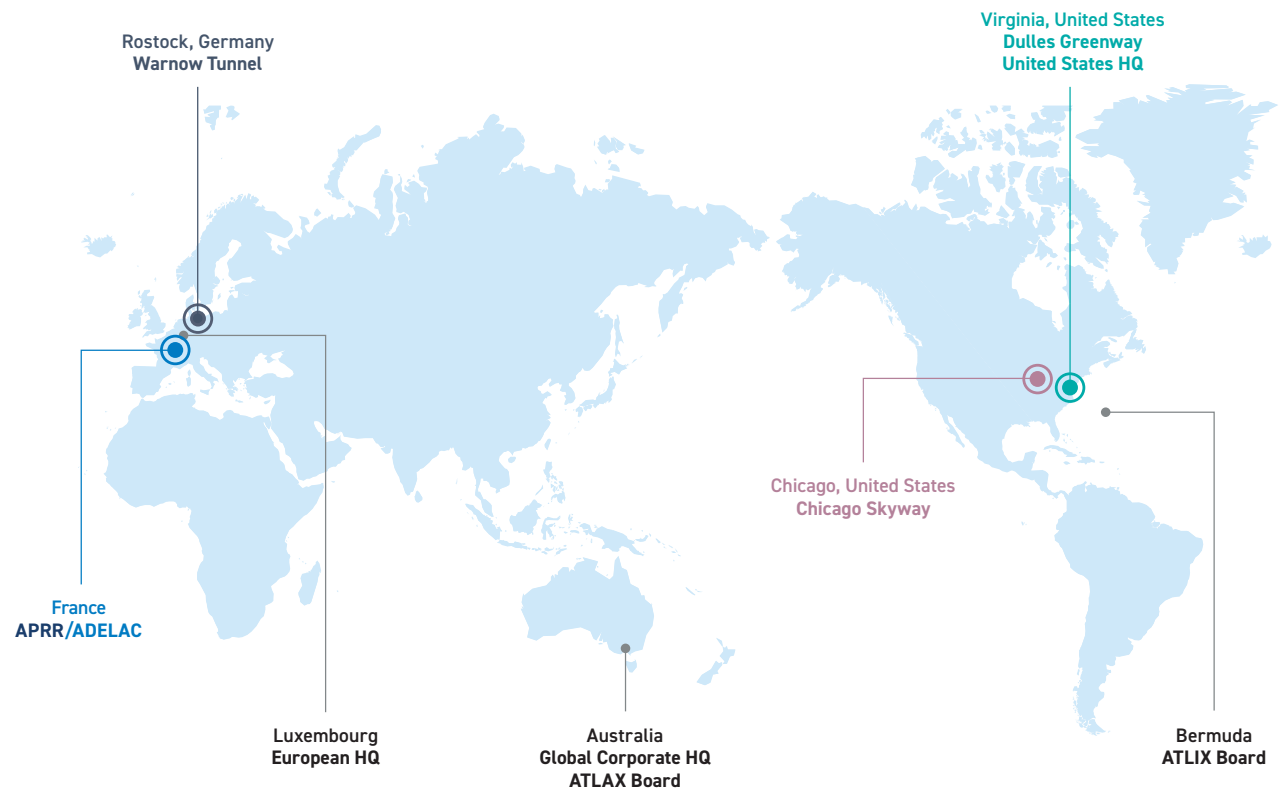
Graeme Bevans, CEO and Managing Director, Atlas Arteria

1. Atlas Arteria Executive Team members, their senior direct reports and CEOs/MDs of wholly and majority-owned businesses.

ABOUT US

Today the Atlas Arteria Group consists of five toll road businesses in France, Germany and the United States. We are focused on ensuring that our customers, and the communities in which we operate, are well served by the transport links we provide. As a global owner and operator of toll roads, our business is to enable people to travel between destinations as safely, quickly, and comfortably as possible.

We are committed to playing a positive role in society and creating long-term value for our stakeholders. From investors and customers, to employees and communities, we take our responsibilities seriously, embedding sustainable business practices as core to our growth.



Ranked
11th out of 175
peers in the Transportation
Infrastructure Industry,
Sustainalytics ESG Risk Rating

Atlas Arteria achieved an
A rating in the GRESB Public
Disclosure Assessment, up from
a B in 2021 and a D in 2020

APRR maintained its
GRESB score of
87 out of 100 in the
GRESB Infrastructure Asset
assessment, up from 55 in 2019

Atlas Arteria rated
AA in the MSCI
ESG Ratings

APRR certified to **ISO 9001**
(Quality Management System)
and **ISO 14001** (Environmental
Management System);
Warnow Tunnel certified to
ISO 9001 and **ISO 45001**
(OH&S Management System)

OUR APPROACH TO SUSTAINABILITY

Our Sustainability Framework helps guide and focus our actions. Developed in 2019, it is based on the outcomes of an external materiality assessment, which identified the topics that matter most: to both the business and its stakeholders (see 'Materiality' section).

The framework is comprised of four Sustainability Priority areas, underpinned by four strong Business Fundamentals. The priority areas reflect the greatest environmental, social and governance (ESG) opportunities and risks for Atlas Arteria and remain the topics of greatest importance to our stakeholders. They are underpinned by our Business Fundamentals that enable us to fulfil our growth potential in a responsible and sustainable way.

SUSTAINABILITY PRIORITIES



Safety

Whether working or travelling with us, safety is our primary focus, and we pursue a zero-harm culture.



Customers and community

We provide positive customer experiences, contribute to our communities and provide safer, faster transport options that make life easier.



Our people

We promote inclusive work environments, fostering an engaged, collaborative and diverse workforce towards business success.



Environmental stewardship

We actively manage our environmental impacts, provide solutions that enable customers to minimise their footprint, and contribute to a low-carbon future.

BUSINESS FUNDAMENTALS



Governance

We are accountable and transparent in all our business dealings.



Ethics, values and culture

We act ethically and promote a culture founded on our five values: Safety, Transparency, Engagement, Environment and Respect.



Sustainable growth

We focus on growing our business and returns for the long term while delivering positive social benefit.



Innovation and technology

We monitor innovations and technology and proactively respond to changing needs and expectations.

Implemented through policies and programs. Monitored through metrics and targets.

Key targets

➤ LTIFR ≤3 at large businesses and LTI ≤1 at small businesses.

➤ Maintain our 40% commitment to gender diversity and evolve representation across and within specific teams.

➤ 25% reduction in scope 1 and 2 emissions by 2025, and 46% by 2030, compared to a 2019 baseline¹.

1. Chicago Skyway is yet to be included in these targets as we undertake a review of their approach.

OUR APPROACH TO SUSTAINABILITY

Materiality

Our materiality assessment in late 2019 identified those sustainability topics that matter most to the business and its stakeholders. The assessment was undertaken by an independent external advisor. Internal and external stakeholders were engaged through a series of surveys, interviews and roundtables, including investors, business partners, suppliers, employees and Board members.

These material issues remain relevant today and are reflected in the Sustainability Priorities and Business Fundamentals in our Sustainability Framework. Key topics are shown below.

To ensure we keep in step with the ever-evolving ESG landscape, along with stakeholder expectations, we are committed to constantly reviewing and strengthening our key areas of focus. Information on how we engage with key stakeholders is provided on [pages 8-9](#).

Material topics



Safety

- Employee safety
- Contractor safety
- Customer safety



Customers and community

- Customer satisfaction and engagement
- Fair pricing and value
- Community engagement and investment



Our people

- Health and wellbeing
- Employee retention, attraction and engagement
- Learning and development
- Diversity, equity and inclusion



Environmental stewardship

- GHG emissions and climate change
- Protecting the natural environment

Sustainability governance

Sustainability at Atlas Arteria is overseen by our Boards and, our sustainability strategy, targets and progress are reviewed, approved and monitored by them.

In 2022, our Boards engaged on relevant ESG topics including safety, climate change, TCFD recommendations, reporting framework developments and equity and inclusion initiatives.

Overall ESG performance is regularly monitored by the senior leadership team. The appointment of a Sustainability Manager in 2021 has helped us to further support and drive our ESG program.

Each of our businesses is responsible for adopting and maintaining its own practices regarding the identification, management and monitoring of risks, including sustainability-related risks, to ensure practices are appropriate and responsive to the level and nature of its specific risk exposures. Our ability to control or influence the ongoing management of these issues differs for each business.




At APRR, Atlas Arteria has a 31.14% interest and, accordingly, appoints Board representatives to promote and support the implementation of good practices. For Dulles Greenway and Warnow Tunnel, where Atlas Arteria holds a 100% economic interest, we work with the Boards and management of the businesses to ensure that policies and procedures are in line with our standards and expectations. Following our acquisition of a majority interest in Chicago Skyway, from 2023 we will work with the business and our partner Ontario Teachers' to further review and if necessary enhance its policies, procedures and approach.

ESG updates are provided monthly to the Executive Team and Atlas Arteria Boards, with in-depth reviews at least once per year. Should a major safety, environmental or social incident occur, it is required to be reported as soon as possible – and no later than within 24-hours of occurrence – to the Boards. The Boards review and approve the Sustainability Report each year.







STAKEHOLDER ENGAGEMENT

We are open and transparent about how we do business. Clear dialogue with our stakeholders is important to building strong relationships, maintaining trust and enhancing our business performance for the long term. Our key stakeholders include our securityholders, employees, customers, governments and regulators, co-investors, suppliers and the wider communities in which we operate. We work to keep ourselves informed, proactively engage with our stakeholders and understand and address changing concerns, expectations and demands.

Stakeholder	How we engaged in 2022	Key topics of interest in 2022	How we added value in 2022
 CUSTOMERS	<ul style="list-style-type: none"> - In person at customer service centres, through dedicated phone lines and email - Direct engagement at rest areas and toll plazas - Customer satisfaction surveys at APRR and Dulles Greenway - Motorway websites, radio and apps - Communication campaigns through various media including information on safe travel, benefits offered by our roads, services provided and special offers 	<ul style="list-style-type: none"> - Up-to-date information on traffic, roadworks, accidents and other hazards - Fair pricing and value, including distance-based pricing models on Dulles Greenway - Comfort, safety, reliability and ease of travel - Availability of relevant customer services through apps and web applications - Assurance of road safety, including a good winter service 	<ul style="list-style-type: none"> - Providing safe, fast and reliable travel, connecting people and trade in the areas we operate - Making travel easy, e.g. with real-time information on driving conditions, improved apps to access network information, effective management of roadworks and automated technology to overcome lost or mis-read toll devices - A focus on safety: reviewing accident response, safety procedures and running customer safety campaigns to promote safe motorways - Access to lower priced fuels in France and discounts offered for frequent users and for use of electric vehicles in 2023 - In France, promoting secured parking areas for heavy vehicles - Engagement with governments towards fair pricing and a quality network
 COMMUNITIES	<ul style="list-style-type: none"> - Outreach and engagement on planned infrastructure developments and toll operation changes - Partnerships with community organisations to support fundraising, sponsorship and other community support - Participation of key executives in community groups, e.g. the CEO of Dulles Greenway is on the Board of the Northern Virginia Transportation Alliance and the Oatlands Historic House and Gardens - Partnerships with local authorities along the toll roads 	<ul style="list-style-type: none"> - Information on planned and existing works that may result in disruptions - Impacts of motorways, e.g. on noise, emissions, visual amenity - Innovation and technology to contribute in the decarbonisation of toll roads - Local community support by the businesses 	<ul style="list-style-type: none"> - Keeping commerce connected and the economy moving - Job creation and access, through use of our motorways, infrastructure development, work experience programs for disadvantaged groups and taxes paid - In France, promoting reserved lanes for regular public transport services and car sharing initiatives in urban areas, with High Occupancy Vehicle lanes and carpooling carparks - Engagement with local communities to address concerns and improve the amenity of our networks, e.g. through landscaping and noise reduction initiatives - Supporting community services and local community groups, e.g. providing free travel for emergency services and school groups, sponsorships and fundraising events - Promotion of cultural heritage and tourism through art along the APRR network
 EMPLOYEES	<ul style="list-style-type: none"> - Team meetings - Town Halls - 'All in Days' to encourage connection/collaboration time in corporate locations - Participation in Board and Committee meetings and off-site sessions - 'Safety moments' and briefings - Annual employee engagement survey - Ad hoc surveys – i.e. Diversity, Equity and Inclusion Diagnostic, post transaction survey, internal audit questionnaire - Ad hoc and quarterly feedback processes - Team/company celebrations - Formal development programs (i.e. senior leader program) 	<ul style="list-style-type: none"> - Safety and wellbeing - Flexible working and creating the right balance - Career opportunities, professional development, recognition and reward - Compensation and benefits - Equity and inclusion - Effective collaboration across a growing global organisation - Business performance and growth strategy 	<ul style="list-style-type: none"> - Initiatives to improve employee safety - Competitive pay and compensation - Action planning to review survey outcomes and agree key areas of focus for 2023 - Ongoing review and consideration of employee policies and processes - Maintain and improve programs meaningful to our people, e.g. development programs, Employee Assistance Program, wellbeing workshops and 'All in Days' to help foster connection across teams - Actively cultivate feedback processes across all areas of the business

STAKEHOLDER ENGAGEMENT

Stakeholder	How we engaged in 2022	Key topics of interest in 2022	How we added value in 2022
 SECURITY-HOLDERS	<ul style="list-style-type: none"> – Annual and half-year briefings – Annual Report and Sustainability Report – Quarterly traffic releases – AGM – Annual program of institutional and retail investor engagement including one-on-one meetings – Investor centre on website – Semi-annual investor survey – Proxy advisor and ESG engagement – Chicago Skyway capital raising engagement 	<ul style="list-style-type: none"> – Distributions – Traffic performance and trends – IFM securityholding – Chicago Skyway acquisition and equity raise – Inflation impact – Organic growth opportunities at APRR and Dulles Greenway – Governance and risk management – Sustainability and ESG – Capital management 	<ul style="list-style-type: none"> – Record distribution guidance of 40 cps, and strong TSR of 8.7% – Delivering on strategic objectives to provide longer-term value creation and sustainable distributions (including the acquisition of a majority interest in Chicago Skyway, commencement of tolling on the A79, and agreement of the Investment Plan with the French Government) – Informative management briefings and ongoing access to senior management – Proactive engagement to understand information needs – Transparency to provide clear insight into business performance, risks and opportunities
 CO-INVESTORS	<ul style="list-style-type: none"> – Monthly meetings – Ad hoc meetings and interactions – Board meetings, at least quarterly – Shared learnings (e.g. on safety, operations) 	<ul style="list-style-type: none"> – Achieving alignment on decisions made – Ensuring all co-investors are informed on key topics for jointly-owned businesses – Opportunities for further collaboration 	<ul style="list-style-type: none"> – Trusted partner, focused on effective collaboration – Expert operating and technical capabilities, contributing ideas and insights towards ongoing business success – Promoting the business's short and long-term interests
 GOVERNMENTS/ REGULATORY AUTHORITIES	<ul style="list-style-type: none"> – Close co-ordination with governments, local authorities and departments of transport – Engagement for project development to achieve common goals 	<ul style="list-style-type: none"> – Positive and constructive relationship with the grantors (and governments if applicable) for all businesses – Compliance with concession contract and regulations – Support for fulfilment of government aims 	<ul style="list-style-type: none"> – Focused on understanding government needs in order to provide solutions – Working with government to assist in developing and deploying public policy outcomes that provide better services and experiences, e.g. roll out of electric vehicle charging stations to all APRR's service areas – Contributing to communities, e.g. through improved safety and community support – Ongoing management, oversight and improvement of motorway infrastructure
 PARTNERS AND SUPPLIERS	<ul style="list-style-type: none"> – Due diligence and compliance activities to ensure alignment of objectives and values – On-ground training and shared learnings with key contractors – Project management engagements 	<ul style="list-style-type: none"> – Fair and timely payments – Application of important standards and expectations, e.g. for health and safety, modern slavery and diversity 	<ul style="list-style-type: none"> – Building long-term and mutually beneficial relationships with partners and suppliers – Enhanced supplier engagement processes, including through a new third-party due diligence tool and targeted engagement with suppliers – Promoting responsibility through the supply chain, e.g. with regard to safety, the environment and responsible employment, by embedding compliance with our Supplier Code of Conduct in supplier engagements

2022 AT A GLANCE

In 2022, we made good progress against our sustainability agenda. We made strong headway in aligning our climate-related approach with the Taskforce on Climate-related Financial Disclosures (TCFD) recommendations, delivering against the first of a three-year roadmap.

We acquired a majority interest in Chicago Skyway in the United States in December 2022. We look forward to working with the team in 2023 to further develop their approach to sustainability.

As we continue on our journey, we remain committed to transparency in our reporting and to constantly evolving, reviewing and improving.



SAFETY

- Achieved lost-time injury target of ≤ 1 for small businesses¹
- Learnings have been applied following the tragic accident at APRR in April, which resulted in one fatality and a serious injury
- Did not achieve lost-time injury frequency rate (LTIFR) target of ≤ 3 for APRR, recording LTIFR of 3.46²
- Implemented a customer-focused safety campaign, 'Move forwards not backwards', at Dulles Greenway
- Achieved ISO45001 certification at Warnow Tunnel
- Standardised use of safety reporting software, Asset Vision, across businesses³ to improve performance monitoring
- Testing of technological safety innovations at APRR to reduce risks to employees working on the motorways



OUR PEOPLE

- Maintained our 40% gender balance across the Boards, senior executives and all corporate headcount
- Commenced a pay equity review for targeted roles at head office to understand opportunities to align policies and practices
- Reviewed and now embedding inclusive policies and practices to support inclusion, including a focus on effective flexible working
- Rolled out employee engagement surveys in wholly-owned businesses, providing an annual and anonymous feedback process for employees
- Performed a diversity, equity and inclusion diagnostic across the corporate team to better understand the employee experience
- Released our second Modern Slavery Statement, including a set of key performance indicators to track performance



CUSTOMERS AND COMMUNITY

- Completed construction of the A79, the first concession in France to be commissioned with free-flow tolling technology from the outset, improving traffic flow and convenience
- Developed the Warnow Tunnel app, providing customers with easy access to price, payment options and tunnel reports
- Undertook the first customer satisfaction assessment at Dulles Greenway, supplementing those already undertaken at APRR and Warnow Tunnel
- Formalised tracking of customer complaints at Dulles Greenway



ENVIRONMENTAL STEWARDSHIP

- Achieved a 9.8% reduction in scope 1 and 2 emissions, compared to 2021
- Completed a baseline (2019) scope 3 emissions assessment for wholly-owned businesses and corporate
- Achieved approximately 23% conversion to electric vehicles within the light vehicle fleet at APRR (132 electric light vehicles now in use, with an additional 101 on order), compared with 4% in 2021. Target to transition 75% to electric vehicles by 2025
- Equipped 100% of service areas along APRR and AREA with high-power and very high-power electric vehicle charging stations
- Completed an additional 12 large wildlife crossings (two completed in 2021) along the APRR and AREA networks; on track to deliver target of 19 in total by 2023

1. This includes Dulles Greenway and Warnow Tunnel.

2. The LTIFR for APRR has been restated from 3.67, as reported in the Annual Report, as a result of a reclassification in the intervening period.

3. Currently excludes Chicago Skyway.



SAFETY

Safety is our top priority. We have a safety-first culture, empowering our people with the right equipment and the right training to do their job safely and maintain safe roads across our networks. Nothing is more important than our people and customers returning home safely at the end of each day.

IN THIS SECTION

- › Our safety management approach
- › Safety performance
- › Safety of our people
- › Road user safety



Our safety management approach

At Atlas Arteria, we take a whole-of-business approach to safety management. Our safety-first culture is driven by our overarching commitment to zero harm.

During the year, we brought structure and uniformity to our business and reporting systems with the operational software, Asset Vision, successfully rolled out for safety reporting across our different businesses. This system streamlines the data collection process and provides clear visibility on safety performance. Our businesses track and report on injuries, as well as any near-miss incidents, with monthly safety updates provided to management and the Board.

Our businesses also continue to share important safety insights, challenges and learnings with one another via cross-business safety workshops.

Warnow Tunnel achieved ISO 45001 certification (health and safety) in December 2022, following an intensive period of reviews and audit. This builds upon the existing ISO 9001 certifications (quality management system) for APRR and Warnow Tunnel, and ISO 14001 (environmental system management) for APRR (see box out for additional detail).

At Dulles Greenway, an internal safety audit was undertaken to examine key processes and internal controls for the management of workplace health and safety. The results showed a strong, underlying safety culture, driven from the top down. Recommendations to be acted upon by Dulles Greenway management in 2023 include the expansion of current policies and procedures to further enhance and support existing controls.

Our businesses undertake regular employee engagement to better highlight and discuss workplace health and safety issues. At Dulles Greenway, the Safety Committee (led by the Safety Manager) is made up of executive leadership and operational staff. It meets monthly to discuss goals, initiatives and address any issues. At Warnow Tunnel, quarterly Health and Safety Committee meetings are held, with external health and safety representatives taking part for additional perspective. At APRR, executive management drives the safety culture, supported by the Occupational Health and Safety Steering Committee, which sets objectives for a two to three-year period and follows up on their operational implementation.

In 2023, we continue to remain focused on building on our strong safety foundations. We will also begin the important work of aligning Chicago Skyway with our safety approach and reporting processes.

Safety performance

There were no lost-time injuries (LTI) to report at Dulles Greenway, Warnow Tunnel or in the corporate team, successfully meeting our target to keep LTI ≤ 1 at each of these businesses.

At APRR, we are deeply saddened by an accident that occurred in April, when three employees were struck by a van. Tragically, it resulted in one fatality and a serious injury.

Support has been provided to the employees' families and to APRR teams as they navigate the impacts of this tragedy. To further minimise risk, APRR created workgroups to deploy action plans addressing key route risks. This includes improvements to equipment, hardware, communications, process reviews and training. A number of innovations that can reduce employees' exposure to risks are being tested (see box out on page 13) and identified learnings from this event have been shared across Atlas Arteria's businesses.

At APRR, we are disappointed to have missed our target to keep LTIFR ≤ 3 , delivering an LTIFR of 3.46¹. This result was driven by an increase in accidents in the summer and Christmas periods. APRR is committed to improving on this, and APRR's COO has subsequently visited with district managers to further investigate and reinforce the safety culture and approach.

1. The calculation methodology for LTIFR in France does not include fatalities or injuries caused by external factors, e.g. accidents caused by motorway users. Thus the APRR LTIFR calculation does not include the injuries to the employees related to the April accident.

What is ISO 45001?

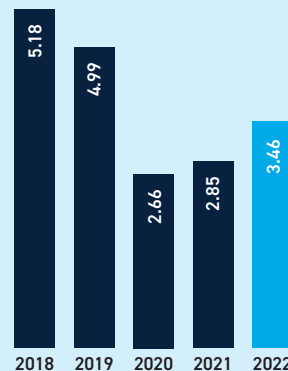
This standard outlines requirements for an occupational health and safety management system and guidance on implementation. It helps prevent accidents at work, occupational illnesses as well as reducing costs. In addition to numerous laws that address occupational health and safety, this standard also aims to embed occupational health and safety into company structures in a sustainable manner and is well integrated with other standards, such as the ISO 9001.

Our safety performance metrics are shown on [page 38](#), and include metrics for both employees and contractors.

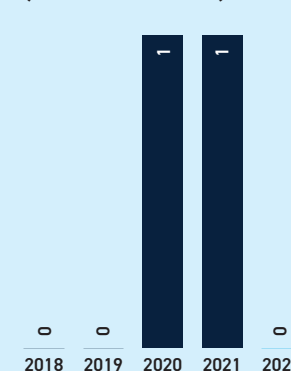
With regards to our safety targets, at Dulles Greenway, our LTI target encompasses both employees and contractors. This is distinct from the approach at APRR and Warnow Tunnel, where the targets only apply to employees.

Contractors at Dulles Greenway perform roles carried out by employees in our other businesses (i.e. APRR and Warnow Tunnel). They are engaged on an ongoing basis and the contractors operate under the daily instruction of Dulles Greenway staff. We believe we share responsibility, along with their third-party employers, for their safety. We therefore include them in our assessment and achievement of Dulles Greenway safety targets.

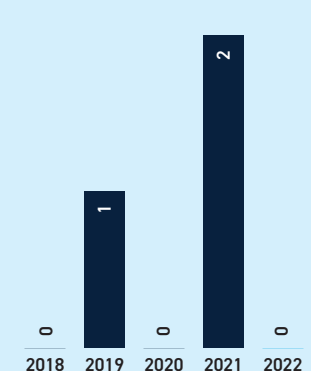
APRR LTIFR



Dulles Greenway
(effective workforce) LTI²



Warnow Tunnel LTI



2. The Dulles Greenway (effective workforce) lost-time injuries reporting encompasses both direct employees and contractors.

Safety of our people

Ensuring our people's safety is paramount. Our comprehensive approach to safety management extends to all operational workplaces, including safety on construction sites, at motorway interventions and in maintenance yards. Support for the emotional wellbeing of our people is also key, and additional information can be found in the ['Our people' section on page 21](#).

Training is a critical component in building a safety-first culture. Training programs include general safety training programs (working safely outdoors, emergency response and fire prevention) as well as operational-specific courses on areas such as equipment handling procedures, identifying risks while working in live traffic and appropriate lane closure procedures.

At Dulles Greenway this year, employees completed the Road Safety Champion Program, a nationally recognised certificate program designed to build a knowledgeable, safety-minded workforce. At AREA a new training centre was established, offering a seven-day training course (delivered over four months) for newly hired motorway employees. This is in addition to the dedicated training centre in Bourg-en-Bresse for APRR, which offers ongoing tailored programs for different vocational groups.

APRR is also working to strengthen oversight of subcontractor safety performance. APRR has introduced obligations for safety reporting from major projects, beginning with subcontractors working on the A480 upgrade. A new training module was also implemented, with the requirement for subcontractor employees to complete training and pass a test before being allowed to work on APRR project sites.

Customer education is also important – for their own safety and for the safety of our workers. In 2021, on the entire French road network, there were nearly 130 accidents involving intervention teams, most of the time due to lack of driver attention. Our businesses run regular awareness campaigns, such as the National Workzone Awareness Week in the US, and website, radio, print press and poster campaigns across the networks. These educate drivers about respecting work zones, safety corridors, intervention vans and speed limits. At APRR and AREA, our service areas encourage motorists to take a break during their trip, and also use the opportunity to promote safety awareness.

Road user safety

We continue to work hard to provide safe road networks for our customers, with a focus on both safe driving conditions and comfort.

At Warnow Tunnel, further improvements were made following the 2020 customer behaviour study. Warnow Tunnel's toll plaza is one of only two such toll plazas in Germany, and many customers are unfamiliar with the process of having to make lane choices for payment. In light of this, and in response to the study insights, new LED signage was installed at the toll plaza to more clearly direct drivers. This aims to prevent last-minute lane changing, reversing, or passengers exiting their vehicles.

The northern-tube ventilation system has also been replaced, making the tunnel safer should there be a fire event. Southern-tube ventilation replacement is scheduled for 2023. A successful emergency exercise with fire brigades was also carried out in November 2022 to test the response between the Tunnel and emergency services ([see case study on page 14](#)). An upgrade to LED lighting on the tunnel's access roads in 2023 will improve visibility conditions at the tunnel entrance, while also reducing energy use.

At APRR, the new A79 motorway opened to traffic on 4 November. This motorway, constructed according to the latest motorway standards in France, vastly improves safety conditions for customers on what has been a particularly accident-prone road ([see case study on page 14](#)).

Customer safety awareness is also a key component of safe roads. A 'Move forwards, not backwards' campaign was run at Dulles Greenway to discourage reversing at the toll plaza, which poses safety risks. APRR and AREA organised road safety awareness-raising workshops at service areas, ran campaigns on safe winter driving and produced a film highlighting the rules and importance of the road safety corridor. Customer alerts on driving risks and bad weather are also provided, e.g. via dedicated autoroute radio stations and online apps, and in partnership with specialised weather forecasting agencies. This provides customers access to real-time information allowing them to make more informed, safer driving choices.

In 2023, APRR plans include providing road safety awareness campaigns in transport companies and driving schools, and equipping motorway areas with wrong-way driving detection systems.

Innovations to improve safety outcomes

Innovations in equipment and processes can improve safety conditions for our people, especially while working on motorways.

At APRR, two major safety innovations are currently being explored to improve safety outcomes for employees. In 2022, APRR trialled the use of robotic equipment to perform tasks associated with higher employee injury risk. This included the use of robotic arms to automatically place and remove traffic cones and remote-controlled robotic trailers displaying warning signs, for use with moving working sites. The new technology is undergoing testing and approval for future introduction.

Additionally, work is underway to introduce a system that can detect risky vehicle trajectories and provide warning to employees. Warnings are delivered via APRR's safety boots, with vibrations in the boots alerting employees to nearby danger. An alarm is also sent to operational headquarters. In 2022, two such devices from two different companies were purchased and will be comprehensively trialled in the first half of 2023.

Case study



Emergency exercise at Warnow Tunnel

In November 2022, an emergency exercise was conducted at Warnow Tunnel to test all elements of emergency response to a fire in the tunnel. This included testing communication and response between the Warnow Tunnel control room and all three fire stations in the Rostock area. The central fire station took command of the operation from the tunnel control room, with the two remaining squads responding on the scene.

To prevent danger to road users, the tunnel was closed to traffic during the operation. To maintain realistic conditions and response times, only a small group of people were alerted to the exercise in advance. The exercise was declared successful by all parties, showcasing an effective hazard prevention plan for Warnow Tunnel.

Case study



Improving comfort and safety along the A79

The A79 forms part of a key east-west transversal link from Royan on the Atlantic Coast to the Rhône Valley and beyond towards Germany, Switzerland and Italy. The 88km section of road was formerly one of the most accident-prone routes in France. Tolling commenced on 4 November 2022, and in the first few months of operation, the road recorded around 820,000 vehicle kilometres travelled per day, with heavy vehicles making up around 40% of traffic.

Upgrades included widening of the existing road and transitioning the single-lane national road to a motorway standard dual-lane road with segregated carriageways. This concession is the first in France to be commissioned with free-flow tolling technology from the outset. This technology eliminates the need for manual payments and delivers a smoother, safer flow of traffic, with improved travel time and comfort for customers. Ecological benefits are also realised, with less land and materials required compared to toll plazas, and ongoing reductions in greenhouse gas emissions through the elimination of vehicles slowing down, idling and accelerating at toll plazas.



CUSTOMERS AND COMMUNITY

Connecting customers and communities is what we do. Improving safety, reducing travel times, enhancing comfort and mobility at a reasonable cost are core to our offerings. We are committed to building strong, respectful connections with the communities in which we operate and creating a legacy of positive impact and engagement.

IN THIS SECTION

- > Connecting communities
- > Improving the customer experience
- > Customer satisfaction
- > Customer complaints
- > Community contributions



Connecting communities

Keeping communities connected and economies moving is at the heart of what we do. Our motorway networks play a vital role in connecting people with their places of work, their families and to social infrastructure and leisure activities that enhance their lives and community wellbeing. Our roads also provide critical routes to support trade, ensuring essential goods and services continue to flow.

In a world that has opened up once again following the COVID-19 pandemic, the role we play in connecting communities has never been more important. It's a role, and a responsibility, we take seriously.

We seek to understand and address what matters to our stakeholders. We ask, we listen, and then we act on their feedback. [\(A summary of our stakeholder engagement is provided on pages 8-9\).](#) We pursue improvements in our offerings and how we add value, both to customers and our communities. Strong communities and satisfied customers are essential to our success.

We are excited that our newly acquired business, Chicago Skyway, is well aligned to our core beliefs. Its mission is to: Provide the safest, most convenient, and most reliable road to and through Chicago. It has a rich history of contributing to and supporting its local communities and we look forward to working with the team in 2023.

Improving the customer experience

We seek opportunities to improve the customer experience on our road networks, pursuing safer, more reliable and faster alternatives for travel at reasonable prices.

On its network of more than 2,400km of motorways, APRR and AREA welcomes more than 20 million customers each year. During the year, the upgrade of the A79 delivered France's first-ever free-flow tolling system to be commissioned from the outset on a highway. This improves fluidity, makes for safer and more time efficient travel while also delivering ecological benefits [\(see case study on page 14\)](#). A new website supporting toll payments in free-flow mode has also been developed. Other evolutions to digital tools include a new webapp for customers suffering a vehicle breakdown on the motorway, and new functionalities and improved account management for electronic toll collection subscribers.

The Warnow Tunnel app was successfully released, providing customers with easy access to their accounts to make changes and top-ups, and access trip reports and the latest traffic, tunnel and weather information. Clearer overhead lane signage at the toll plaza was implemented, along with additional credit card terminals and OSCARD readers, simplifying payment options and top-up processes on customer cards. These convenient, contactless options save customers valuable time at the toll plaza.

In 2022, Warnow Tunnel commenced preparation for the installation of advanced cameras for licence plate recognition in the toll lanes, providing an alternative to RFID (radio-frequency identification) strip identification. In the event the RFID strip (on a customer's windscreen) cannot be read correctly, cameras can identify the customer via their number plate, increasing read reliability and reducing errors.

Dulles Greenway also began testing a new camera system at the toll plaza. The system seeks to improve safety, removing the need for lane walkers at the plaza. It also improves the collection of unpaid tolls, supporting accurate and timely notifications to customers regarding non-payment, and eases the way for customers who have forgotten their toll pass, improving fluidity of traffic.

Keeping up with new technologies is also a key part of making travel easy. We look to ensure our roads are equipped for the future. APRR participates in the European C-Roads project, evaluating how road infrastructure and vehicles can best communicate with one another. Antennae have been installed on the A43 and A48 between Lyon and Grenoble. These will be able to inform equipped vehicles about changed traffic conditions ahead or obstacles on the roadway. Development of appropriate communications for autonomous vehicles is also underway, with APRR testing communications required to ensure seamless passage through toll plazas. See [case study on page 18](#) for additional details.



In 2022, free-flow gantries were installed at the junction of the A41 and A43 (Lyon/Grenoble/Chambéry) on AREA in the direction of Annecy and on the A79 (Montmarault/Digoin) on APRR. Early feedback from travellers has been positive.

“The new ramp to the A41 towards Annecy already allows me to save time for my journey. From now on, I no longer need to stop to take a ticket; you don't even have to slow down. It also makes traffic more fluid and there is no waiting to access the A41. In addition, I can more easily pick up speed to get on the highway: I find it safer! Since there is no more stopping and restarting, I also consume a little less fuel.”

Romain, bank agent

Plans are in place to switch the majority of AREA's entry points to free-flow tolling under an investment plan agreed with the French State in early 2023.

Customer satisfaction

Customer experience and satisfaction are a key focus across our businesses. We engage with our customers to understand their needs, concerns and what matters to them.

At APRR, our customer satisfaction assessment continued to return a strong result of 8.1 out of 10 (the same result as in 2020 and 2021), highlighting our ongoing commitment to maintaining high levels of customer satisfaction.

We are pleased to report that Dulles Greenway undertook its first customer satisfaction survey in May. Undertaken in conjunction with the Run the Greenway event, the survey attracted around 340 participants, with 91% feeling satisfied with the overall experience of driving on Dulles Greenway. Very high levels of satisfaction (above 94%) were noted for road conditions, safety and travel time, while pricing was the sole point of dissatisfaction, attracting a 50% dissatisfaction rating. The 2022 results align with findings from community focus groups held in 2021.

There was strong support for a distance-based pricing model (86%), which would provide more equitable pricing. Dulles Greenway and Atlas Arteria have been pursuing distance-based tolling with the Virginia Department of Transportation (VDOT) for several years. This would present mutually beneficial outcomes for our customers and the business. This would include a more equitable tolling system than the current flat-rate fare, with savings for those travelling shorter distances, and would encourage a greater number of people in the community to benefit from the use of the motorway.

At Warnow Tunnel, periodic customer satisfaction assessments are undertaken. The most recent was completed in 2020, in conjunction with the customer behaviour study focusing on customer driving behaviour while approaching the toll plaza. A satisfaction rating of 8.3 out of 10 was achieved. Upgrades are being implemented to improve customer driving behaviour ([see 'Safety' section, page 13](#)). Further satisfaction assessment will be undertaken once these have been completed and customers have had the opportunity to experience improvements made.

Customer complaints

We make it our priority to listen to and address any customer complaints we receive, as this is central to maintaining high levels of customer satisfaction. At APRR, the main areas of customer complaint are generally related to toll payment, for example due to the absence of badge entry data, and electronic and automatic toll classification. We are committed to making progress to improve customer satisfaction in these areas, and we are pleased to report a decreasing trend in 2022.

Dulles Greenway formalised its complaints-handling process in 2021, making 2022 the first year for them to report on complaints. As at APRR, the majority were associated with tolling disputes. The implementation of cameras at the toll plaza during 2023 will help to address this. Dulles Greenway reported a fast complaint response rate, with all complaints addressed within five days.

At Warnow Tunnel this year, all complaints were addressed within 10 days, with the majority addressed within five. At APRR, 96.5% of complaints were addressed within 10 working days and 99.8% within 30 days¹, against targets of 90% and 98.5% respectively.

The number of complaints represented around 1 in 69,000 toll road trips at Warnow Tunnel, 1 in 16,000 at APRR and 1 in 10,400 at Dulles Greenway.

Community contributions

Helping our communities thrive, and being a valued member of those communities, is essential to our success and to ensuring we are welcome.

We strengthen communities through direct and indirect contributions: connecting communities, creating jobs, paying taxes and making voluntary contributions.

Examples of direct and indirect business contributions made in 2022 include the following:

- Completion of the A79 has improved infrastructure for the community and created around 1,000 jobs for regional subcontractors engaged in construction.
- The A480 upgrade, improving safety and flow for more than 100,000 vehicles a day, will also free up space for other modes of travel including new footbridge facilities for pedestrians and cyclists.

– APRR's recent €410 million capital investment agreement with the French Government will fund environmental protection as well as motorway upgrades, safety developments and customer service improvements. The agreement speaks to APRR's ability to build strong relationships and to work on mutually beneficial solutions for better customer and community outcomes.

– Free travel for essential community services such as police, fire authority, ambulance and school bus services. In 2022 this was valued at approximately €2.3m at APRR, US\$825,000 at Dulles Greenway, and €206,000 through Warnow Tunnel.

Each of our businesses also proactively invests directly in communities through voluntary contributions and fundraising activities. In 2022, activities included the following:

- Fundraising of US\$220,000 through the second annual Run the Greenway event in May, with an additional US\$50,000 donated to charities ([see case study on page 18](#)).
- Support for Help for Others during the holiday season, with Dulles Greenway providing trucks to help transfer toys, and employees organising gifts for several families.
- Livestream of nesting bald eagles in the Dulles Greenway Wetlands, providing engagement and educational opportunities.
- Use of the Warnow Tunnel as part of the 'hella Rostock' marathon route, and contributions of around €45,000 in support of local community groups, including the Rostock Zoo.
- Small gestures at Warnow Tunnel to celebrate community, such as the provision of roses to women drivers on International Women's Day, chocolates on St Nicholas Day, and the ongoing celebration of every millionth customer through the tunnel with gifts.
- Contributions of almost €180,000 in France with a general focus on promoting sport, safeguarding heritage and supporting culture and cultural events.



1. As at end November 2022.

Case study



Runs on the board for local charities

Despite a wet spring morning, the second Run the Greenway event, held in May 2022 in Northern Virginia, saw more than 1,700 people take part, raising around US\$220,000 for 22 local non-profits.

The event, designed to be accessible to many, offered five and 10-kilometre distances, as well as an 800 metre Kids' Fun Run along Dulles Greenway. It allows participants to raise funds for charities and to experience the motorway from a completely different perspective.

In addition to the resources input to organise the successful event, Dulles Greenway donated US\$50,000 to various charities in support of the chosen charities of race winners.



Case study

On the road to self-driving cars

It is only a matter of time before some of the first autonomous (self-driving) cars arrive on our roads. As part of the European C-Roads project, APRR is participating in the development of connected infrastructure, focusing on effective communications between toll plaza equipment and autonomous vehicles. Some of the necessary communications includes: letting vehicles know which lanes are open and available to them according to the different means of payment available to the vehicle, as well as sending guidance information to the vehicles. Messages take the form of radio signals, sent via message pylons to the cars.

A testing site has been set up on A6, next to the main toll gates of Fleury en Bière. The project is being completed in partnership with Valeo, an automotive supplier and technology company. During the year, the APRR team completed the communication architecture and messaging to be exchanged with Valeo's automated vehicle, while Valeo developed the connectivity module in the vehicle. Testing of communications began at the end of July 2022, with crossings in autonomous mode carried out from September. Testing will be completed during 2023, after which findings will be shared at the European level.

The advent of autonomous cars is expected to have positive impacts for traffic conditions. According to an international study (conducted mainly by the United States), even a 5% overall representation of autonomous vehicles on roadways would significantly improve traffic conditions. This is possible because these vehicles more effectively moderate travel speeds, reducing frequent alternation between accelerating and braking. This will deliver the additional benefit of emissions reductions.



OUR PEOPLE

Across our corporate and subsidiary businesses, our people are essential to our success. We are committed to building a team of diverse, passionate, driven and innovative people. We seek to provide them with the right resources, environment and learning opportunities to thrive and feel valued for the work they do. Inspiring and empowering our people helps us grow value for all our stakeholders.

IN THIS SECTION

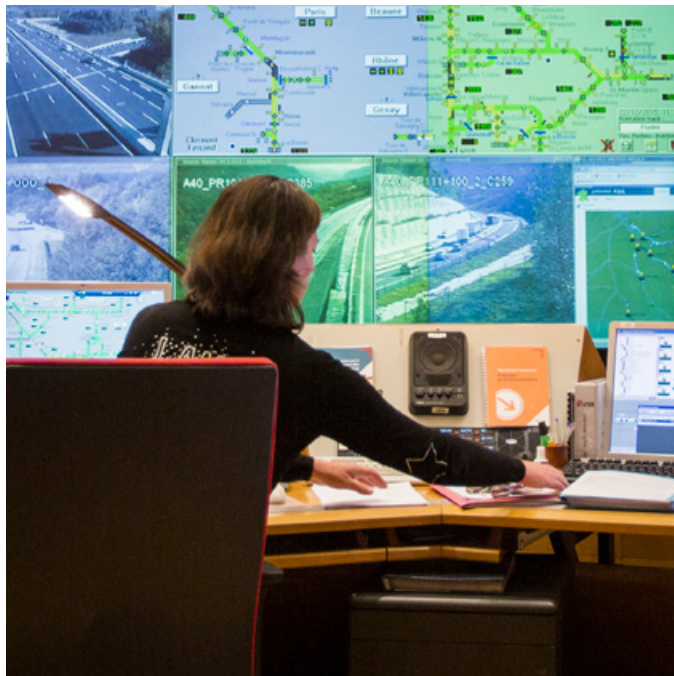
- Leading change
- Employee engagement
- Supporting health, safety and wellbeing
- Growing our people
- Inclusion and diversity
- Human rights and modern slavery



2022 was a transformative year for Atlas Arteria. As the world emerged from the COVID-19 pandemic, our people brought their energy, motivation and unwavering dedication to keeping one another – and our customers – safe. They also worked hard to help Atlas Arteria achieve its commitments and growth goals. The addition of Chicago Skyway to our business could not have been achieved without the hard work of our people, who consistently add value to the business.

We continued to work hard to build a consistent and rewarding employee experience for our people, and we seek to understand the experience from their perspective. Supporting wellbeing and growing engagement, diversity and skills are essential to our success.

APRR's commitment to building a culture that is diverse, inclusive and where employees feel valued, was recognised again this year. For the eighth consecutive year, they were named France's Best Employer in its sector by Capital magazine. Warnow Tunnel was also named as one of only two finalists in the '2022 Company of the Year in MV' award in the category 'Securing skilled workers and family friendliness', in recognition of the work they have done to create a positive and family-friendly working atmosphere at the company.



Leading change

Our corporate team has worked hard during the year to continue to engage and support our employees to improve the employee experience at Atlas Arteria.

Following the launch of our revised Flexible Working Policy in 2021, feedback from our people has been incredibly positive. Nine out of 10 employees said they feel genuinely supported if they choose to make use of flexible working options. This contrasts with 2019, when work life balance and flexibility were flagged as areas for improvement.

In 2022, we helped to drive better access to flexible working for everyone by:

- introducing 'All in Days' to bring local teams together regularly;
- continuing virtual programs on leadership and wellbeing to ensure access, no matter where people are working from;
- creating opportunities to improve in-person connection, celebration and collaboration, which we will continue to evolve and improve.

Our STEER values (Safety, Transparency, Engage, Environmentally and socially responsible and Respect) guide the decisions we make and the way we work with one another across Atlas Arteria. We have run workshops to engage our employees and stakeholders in a process to refresh the wording of our values and help develop a view of what STEER looks like in action in our business. The changes will be launched in early 2023 and embedded across all elements of the employee experience to reflect our diverse workforce.



80% of employees would recommend Atlas Arteria as a great place to work, up from 76% in 2021

Employee engagement

In 2022, we conducted our second Employee Engagement Survey for the corporate team. There was a strong participation rate of 83%, with a 10% increase on the engagement result from 2021. The overall results were pleasing, showing good levels of engagement and improvements in key areas on last year's results.

Areas where we are doing well include the following:

- **Defining our strategy:** 98% of employees recognise how their work contributes to the goals of the business.
- **Collaboration:** 85% of employees say we effectively collaborate across the business to get work done.
- **Taking action:** 75% of employees trust the feedback process, and recognise that action will take place from the survey.

There was also positive feedback on how working at Atlas Arteria makes employees feel: 80% would recommend it as a great place to work; 83% feel respected; and 88% say they know what they need to do to be successful in their role.

As with all feedback processes, we recognise there is still work to be done. While our strategy has been clearly defined, more work is needed to engage our people in a compelling story that conveys what it means for them and for our business (63% indicated the Executive Team has communicated a vision that motivates them). We want to focus more on getting our feedback and recognition processes right and explore our people's expectations around how we can be more innovative (38% felt that we act on new and promising ideas). We also want to look for ways to drive a greater social connection and provide ways for our people to make more of a positive difference. In the areas employees told us we could do better, we commit to making progress and implementing initiatives to affect positive change.

At our businesses, we are pleased to report that baseline engagement surveys were successfully introduced for the Dulles Greenway and Warnow Tunnel teams. These represent annual opportunities for formalised, anonymous feedback across the businesses. Action plans to address findings from each of these surveys will be developed in early 2023. Similarly, APRR deployed an internal 'social barometer' for the first time. This questionnaire, sent to all employees, enables measurement of employee satisfaction and will be undertaken every two years for measurement of progress.

Supporting health, safety and wellbeing

While the more tangible impacts of the pandemic have receded, less tangible mental health impacts have continued. As people continue to grapple with health, social and economic repercussions, our people's mental health and wellbeing have never been more important.

Across the corporate team, coaching, support and targeted workshops were offered. These focused on aspects such as supporting employees to recognise and prevent burnout, build awareness around helpful and hindering thoughts, and to generally build healthy and sustainable habits. Developing our leaders was also a focus, with a view to ensuring they understand the important role they play in championing and supporting wellbeing.

Foundational tools and support include our Employee Assistance Program, our approach to flexible working and access to the Headspace app, which provides accessible programs for individuals and their families on key issues including anxiety, sleep, mindfulness and movement.

At our motorway businesses, wellbeing support takes various forms. This includes Employee Assistance Programs and other psychology support services, mental health and wellbeing seminars and regular health check-ups. During 2022, initiatives included resilience training at Warnow Tunnel and stress management, conflict resolution and team building at Dulles Greenway. At APRR, their work to prevent Psychosocial risks was further supported through the deployment of a listening service, allowing anonymous access for employees.

Growing our people

Engaged, challenged and inspired employees, who have visibility of their development pathways, are key to the success of any business and to attracting and retaining the best talent. Alongside development opportunities offered to teams, our annual review processes allow our people to proactively identify specific development needs and the options available to them.

In 2022, the acquisition of Chicago Skyway presented significant opportunity for on-the-job training and development, with employees from across corporate business functions working to deliver this large and complex transaction. Our in-house program developed for senior leaders seeks to strengthen connections within the leadership cohort, and in 2022 sought to equip participants to lead through change and ambiguity.

We cultivated targeted programs for specific teams to improve ways of working and strengthen relationships across the group. 'Core skills' programs were also offered, including those targeting improved communication and presentation skills.

At APRR, courses covered skills development, the customer experience, effective management and diversity and inclusion training. At Warnow Tunnel, as well as safety and wellbeing training, the team supported a technician in his Masters training. Dulles Greenway employees take at least two courses per month, with offerings including risk management, recognising and overcoming unconscious bias and cyber security.

We continue to strengthen our monitoring of learning and development to gain additional insight into how we are supporting employees. During 2022, Warnow Tunnel introduced a process to track training hours spent per employee. Widespread monitoring of corporate team training will be revisited in 2023.

Inclusion and diversity

Cultivating a diverse and inclusive workforce is a responsibility we take seriously. Providing workplaces where our people feel welcome and free to bring their whole selves to work is important to us.

In 2022, we were pleased to maintain our 40% commitment to gender diversity, in line with our target, across our Boards, senior executives¹ and our corporate employees.

We launched our first Diversity Equity and Inclusion diagnostic at corporate, to better understand the lived diversity experience in our business (see case study on page 22). We also commenced a pay equity review for key roles to understand opportunities to review and align policies and practices. The embedding of our policies and practices to help make flexible working effective further supported our inclusion efforts.

In 2022, APRR signed a charter of commitment (l'Autre Cercle/ Other Circle charter) to the inclusion of LGBT+² people in the workplace. Diversity and inclusion training also continued at APRR. Partnerships with several associations, including schools, educate younger girls about work opportunities in the sector.

Our People metrics, including headcount by gender, age and seniority, and training hours, are shown on [pages 38-39](#).

A GLOBAL AND DIVERSE TEAM: RESULTS OF OUR DIVERSITY, EQUITY AND INCLUSION DIAGNOSTIC



First year we have undertaken a diversity, equity and inclusion diagnostic at the corporate level

87% participation



44% female

10+ languages proficiently spoken



7% of our people identify as two or more ethnicities

1. Includes Executive Team and their senior direct reports, including the CEOs and MDs of wholly and majority-owned businesses.
2. LGBT+ is the acronym that represents the sexual orientation or gender identity of lesbian, gay, bisexual and transgender people, to which are added queer, intersex, asexual people, etc.

Human rights and modern slavery

We continue to progress our approach to human rights and modern slavery. We released our second Modern Slavery Statement in 2022, reporting on how we identify, manage and respond to modern slavery risks in our operations and supply chains. During the year, we continued to improve our due diligence process, engaged with higher-risk suppliers and continued deeper investigation into our second-tier supplier network.

Initiatives in 2022 included

- Updated our Supplier Code of Conduct to increase modern slavery law compliance expectations of our direct suppliers and supply chain due diligence for our second-tier suppliers.
- Adopted modern slavery key performance indicators to evaluate and track Atlas Arteria's performance in mitigating modern slavery risks.
- Targeted engagement and consultation with potential at-risk labour hire toll workers, with the aim of better understanding their working arrangements and increasing their awareness of Atlas Arteria's position on modern slavery and whistleblower protection procedures.



Our Modern Slavery Statement can be accessed on our website.

The Statement will be updated in June each year.

Case study



Diversity, Equity and Inclusion (DEI) diagnostic

In 2022, we rolled out the first DEI diagnostic as an opportunity to better understand the lived diversity experience for our corporate employees. The diagnostic will run every three years, alongside the annual Employee Engagement Survey, which also provides diversity insights.

We were pleased to see a high participation rate of 87%. Responses reinforced that employees view our commitment to diversity and inclusion as genuine: 83% of employees responded favourably to the statement 'Atlas Arteria truly values diversity'.

Other key insights from the diagnostic:

- employees are comfortable sharing information about their background and experiences at work;
- people do not feel held back by perceived barriers, with an 80% favourable response to 'people from all backgrounds have an equal opportunity to succeed at Atlas Arteria'; and
- people feel strong progress has been made in relation to inclusion, belonging, respect and levels of equity and fairness in how performance is evaluated.

Feedback has also highlighted that while we have invested in programs to address unconscious bias and look at ways to better understand and leverage individual preferences, there is more work to do for all of our people to feel safe to speak up.

Results from the diagnostic are already being used within the business to refine the way we work with each other. The outcomes of the assessment have helped to start important conversations about how we think about diversity and inclusion and how the work will never truly be 'done'.



ENVIRONMENTAL STEWARDSHIP

As a global owner, operator and developer of toll roads across three countries – with concession end dates of up to 2104 – climate change is important to us. We believe that addressing emerging climate change impacts and protecting our environments is a responsibility that belongs to all of us. We strive to proactively reduce our environmental footprint, support the health of our ecosystems, and deliver better outcomes for all our stakeholders.

IN THIS SECTION

- › Greenhouse gas emissions
- › Customer emissions
- › Climate change impacts and adaptation
- › Protecting the natural environment
- › Resource use



As climate change concerns continue to increase across the globe and energy costs rise, we remain committed to reducing emissions, minimising our environmental impacts and empowering our customers to do the same. We know our approach to sustainability is important to our stakeholders and we continue to work hard to operate and design our motorways to help build a cleaner future.

With the increasing push towards shared mobility to reduce emissions, we are expanding support for carpooling and linkages with other mobility options on our networks. We look for opportunities to minimise environmental impact and make improvements for the environment, our communities and our business. We are also strengthening internal processes, rolling out an environmental data collection platform to improve tracking and monitoring of data.

Our greenhouse gas emission reduction targets¹

- 25% reduction in scope 1 and 2 emissions by 2025; and
- 46% reduction in scope 1 and 2 emissions by 2030, compared to a 2019 baseline;
- Aligned with a 1.5°C warming scenario and calculated using a methodology that is consistent with the Science Based Targets Initiative (SBTi).

1. Chicago Skyway is yet to be included in these targets as we undertake a review of their approach.

Greenhouse gas emissions

Our greenhouse gas (GHG) emission reduction targets, established in 2021, encompass our scope 1 and 2 emissions and are aligned with the Paris Climate Agreement, 1.5°C warming scenario.

In 2022 we completed assessment of our baseline (2019) upstream scope 3 inventory for corporate and our wholly-owned businesses. APRR is currently undertaking a similar process. Collectively, this will provide insight to our scope 3 emissions so that we can best approach how we manage and address them.

Collection of GHG data for the Chicago Skyway will commence in 2023.

In 2022, Atlas Arteria achieved a year-on-year 9.8% reduction in scope 1 and 2 emissions², driven by energy savings initiatives and the work undertaken in 2021 to eliminate inefficient air conditioning equipment at APRR. Our environmental metrics are presented on pages 40-41.

The move to renewable electricity has been a focus across our businesses:

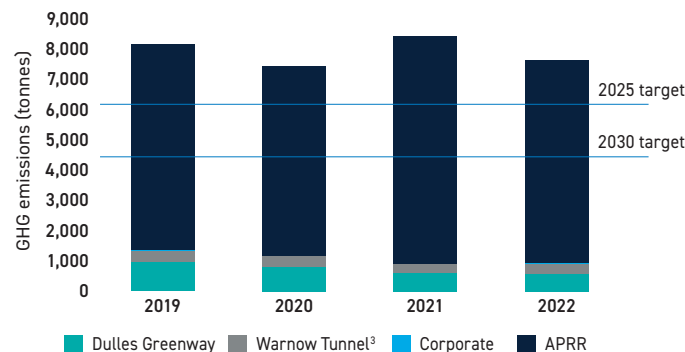
- Warnow Tunnel shifted to 100% renewable electricity in 2021.
- In corporate, the Luxembourg office moved to renewable electricity in 2022. The Melbourne corporate office, which has seen a doubling in electricity-related emissions due to a larger office footprint, will consider transition options in 2023.
- APRR has transitioned to 100% renewable electricity as of 1 January 2023.
- Dulles Greenway is currently investigating options for the transition to renewable electricity.

At APRR, a new ESG department was launched in January 2022. The Ecological Transition Department (ETD) has been established to evaluate and monitor projects that seek to reduce GHG emissions. The evaluation incorporates a holistic approach, assessing potential GHG emissions reductions as well as potential biodiversity and natural habitat benefits. The ETD operates under the direction of APRR's Deputy General Manager and reports monthly to APRR's top 20 managers.

Actions to address GHGs at APRR and AREA during 2022:

- **Electrifying the light vehicle fleet:** 132 electric light vehicles in use with an additional 101 on order, accounting for approximately 23% of the light vehicle fleet. This is up from around 4% coverage in 2021. An additional 83 own-use charging stations were also introduced in support, taking the total to 132. APRR aims to convert 75% of its fleet by 2025.
- **'Energy sobriety' plan launched:** focusing on four pillars under which energy savings can be realised (air conditioning/heating, lighting, travel and use of equipment). Initial employee engagement initiatives were undertaken in 2022, with additional actions planned for 2023 and 2024.
- **LED replacement program:** including replacement of public lighting at rest areas (by the end of 2024, all 138 rest areas will be equipped with LEDs); in toll plaza canopies; and in buildings, where 620 new panels have been installed.
- **Equipment upgrades:** replacing energy intensive operating equipment, including a new program to replace the most obsolete fuel boilers, which is expected to run between 2023 and 2027.
- **'Acting low carbon' training:** introduced to build a low-carbon culture amongst employees, 69% of employees had completed the training by the end of 2022.

GHG emissions



Scope 1 & 2 GHG emissions (tonnes)	2019	2020	2021	2022	2022 vs 2021 (%)	2022 vs 2019 baseline (%)
APRR	6,800	6,281	7,527	6,676	-11.3%	-1.8%
Dulles Greenway	950	797	601	574	-4.4%	-39.6%
Warnow Tunnel ³	394	343	276	307	11.3%	-22.1%
Corporate	24	19	33	54	63.5%	124.9%
Total	8,168	7,439	8,437	7,611	-9.8%	-6.8%

2. Excluding Chicago Skyway, for which data is not yet gathered.

3. Reported scope 2 emissions at Warnow Tunnel do not account for the business's transition to 100% renewable electricity in 2021. Under market-based calculations, Warnow Tunnel scope 1 and 2 GHG emissions equated to 31 tonnes in 2021 and 28 tonnes in 2022.

APRR and AREA have also continued the installation of solar farms along the motorways, with four sites now in service. During 2022, two large solar farms were added on the A6 and the A19, with 5.7MW capacity and 10.5MW capacity respectively. These are in addition to the 3.8MW and 4.9MW sites implemented in 2021. Solar panels have also been integrated on the Dompierre maintenance centre on the A79, with 290kW capacity.

APRR powers on with renewables

In APRR's push toward a low-carbon future, a solar farm near the A19 was commissioned in 2022. Located on a disused motorway site, the 26,000 solar panels will produce the equivalent annual electricity consumption of 4,600 people, which will meet one quarter of the electricity needs of the Community of communes of Gâtinais in Burgundy. The installation, in Subigny and Villeneuve-la-Donnagre, was built in partnership with EDF Renewables and Eiffage.

At Dulles Greenway, electricity usage decreased by around 7%, contributed to by the 2021 transition of the toll plaza and building to LED lights. Investigations are underway into the potential for replacing toll gantry lights to LED, while the parking lot lights were replaced in early 2023. Initial investigations exploring the possibility of installing solar panels along the motorway route indicate that space limitations prevent this from being viable.

At Warnow Tunnel, a preliminary study was undertaken in 2022 to better understand the associated costs to upgrading the tunnel and surrounds to LED lighting. The current lighting consumes significantly more electricity than LEDs and is more maintenance intensive, making the upgrades an attractive option for both energy and cost savings. Upgrades to the lighting at the tunnel entrance will also enhance safety, providing drivers with improved ability to adapt to lighting conditions in the tunnel.

Customer emissions

With road transport accounting for around 15% of global emissions, it's important we are empowering our customers to reduce their own carbon footprint.

In 2022, APRR successfully met its target to roll out electric vehicle charging stations to 100% of its service areas ([see case study on page 27](#)). Electric vehicle drivers are further supported through APRR's apps. The Fulli (formerly KiWhi Pass) payment card provides customers with access to around 200,000 charging points across France, the Netherlands, Belgium, Germany, Italy, Spain and Ireland. It works in conjunction with APRR's Fulli (formerly Mango Mobilites) app, which allows customers to locate terminals, identify charging rates and receive real-time information on availability, as well as manage their Fulli account. In February 2023, APRR and AREA launched an offer to customers to further support the transition to electric mobility. A 5% discount will be applied to all toll rates for all electric vehicle journeys on the networks for one year.



In support of government aims for increased carpooling in France, APRR continues to add new carpooling car parks. An additional 16 carpooling car parks were constructed during 2022, taking the total to 114. Together, these provide around 5,700 car spaces across the network. See the [case study on page 27](#) for further information on the developments at Dijon and Beaune.

Other new technologies that support emissions reduction include the new, free-flowing toll technology along the A79, which reduces emissions resulting from customers stopping and starting at toll plazas ([see case study on page 14](#)). As part of the new Investment Plan, the majority of the AREA network entry points will also be switched to free-flow tolling. Atlas Arteria looks forward to working with the French Government as it considers more widespread application of free-flow tolling on the APRR Group network.

Testing of a new 'low-rolling resistance asphalt' is also scheduled for 2023. Reduced friction on the asphalt should result in a reduction in fuel consumption and greenhouse gas emissions as well as less noise generation and a slower wear and tear of tyres. A site a few kilometres in length will be defined in early 2023, with tests carried out in partnership with Eiffage Route.

Climate change impacts and adaptation

We recognise that our businesses, people, customers and communities will be impacted by climate change. Potential adverse effects may include impacts on maintenance requirements, structural integrity and vegetation (resulting in erosion) along our roadways. Considerable work has been undertaken this year to understand and assess our climate-related risks, including how they may impact infrastructure, the health and safety of our people and customer use of our roads. We have used the Taskforce on Climate-related Financial Disclosures (TCFD) recommendations to guide our approach. Details are presented in the ['Climate risks and opportunities section'](#) of this report.

We use new technologies to assist with monitoring our motorway infrastructure, including sensors and drones. These technologies provide a more comprehensive view of structural integrity and potential abnormal operation, which changes to climate may exacerbate. For example, sensors can monitor the ground movements around bridge piers and measure the longevity and behaviour of concrete. Drones are used to observe more inaccessible areas, such as under bridge decks. This is essential to the upkeep of our businesses and the safety of our users.

Protecting the natural environment

The expansive nature of motorway networks means that there is a high potential for environments and habitats to be disturbed – both in construction and operation. The extensive lands associated with the roadways also require management and maintenance, and present the opportunity for ecological and visual amenity.

At APRR and AREA, where large capital works projects are most frequently undertaken, the businesses follow the 'avoid, reduce, compensate' hierarchy of action for all new projects.

APRR and AREA partner with external environmental experts and conservation agencies to help assess, maintain, or manage sensitive areas along the motorways. This approach helps to measure the long-term effectiveness of our environmental compensation measures.

On the A79, newly installed hydraulic structures have helped to improve the flow of water, sediment and fauna, and wildlife friendly crossings improve environmental connectivity and safety (for people and wildlife). Additionally, the collection and treatment of stormwater runoff from 79 basins along the route helps to protect surrounding environments from road runoff and potential spills.

Work on the A480 has been similarly designed to improve environmental performance and preserve habitat. For example: noise pollution is minimised with the installation of six kilometres of acoustic protection; stormwater is being retained and treated, where previously it was discharged directly to the surrounding waterways; species and habitats are being protected; and plant diversification is taking place to attract new species alongside existing beavers, bats, aquatic birds, reptiles and amphibians.

Other initiatives at APRR and AREA include:

- By the end of 2022, 14 of the 19 large wildlife crossings had been constructed, up from two in 2021. These 25m wide, vegetated and tree-lined 'eco-bridges' connect wildlife corridors across our motorways, offering safe passage for fauna. The remaining five crossings are due for completion by 2024.
- Restoration of wetlands and open grasslands, creation of ponds and eradication of invasive plant species as part of the A43-A41 Chambéry Interchange works.
- Upgrades along 35km of AREA motorways to protect the quality of water in drinking water catchments and other vulnerable areas. This includes eight sites on the A41N, A43, A48 and A49 motorways in Savoie, Isère and Drôme.
- An additional 100ha of eco-pasture was introduced, bringing the total to 250ha. Eco-pastures use sheep and goats to maintain green areas, especially in areas more difficult to access. This reduces emissions due to mowing and improves safety for our people.

In Virginia, the 149 acre Dulles Greenway Wetlands continue to provide a haven for wildlife. The wetlands were created during the construction of the motorway, to compensate for 65 acres affected by the development. For the second year in a row, live-stream eagle cameras provide insight, education and engagement on the nesting habits of two resident bald eagles.

At Warnow Tunnel and Dulles Greenway, initiatives are underway to support local bee populations. Dulles Greenway is working to create a roadside pollinator habitat at a test site along the motorway. Three hundred native plants and 10 pounds of wildflower seeds were planted in October 2022. A bee meadow will also be planted at Warnow Tunnel toll station in 2023. In addition to supporting bee populations this also seeks to: increase vegetation to stabilise slopes and reduce erosion; reduce mowing so plants can mature and produce seeds; decrease stormwater runoff; and decrease the opportunity for invasive species.

Dulles Greenway also continued its upgrade of salt spreaders, with one additional unit purchased in 2022. Utilised in the management of snow and ice on the roads, the new electric salt spreaders help to use salts more efficiently, improving environmental performance. The units also provide energy and safety benefits, reducing fuel use and removing the need for re-fuelling during snow events.

Resource use

We continue to monitor and seek to expand our data on water usage and waste. We have expanded our reporting this year to include water usage at Dulles Greenway. Waste data has also been collected from our global headquarters in Melbourne, with expansion of the metrics to include recycled volumes. Comprehensive information on waste data for Warnow Tunnel and Dulles Greenway is not currently available.

At APRR and AREA, approximately 19,000 tonnes of waste was collected in 2022. Over 76% of this was recycled or used in energy recovery. This volume is almost double that from 2021, predominantly due to waste evacuated as part of a major basin cleaning program. The higher volume of customers using the network in 2022 also contributed to this result.

In a typical year, approximately two-thirds of APRR and AREA waste is generated by customers. There is ongoing customer education at rest areas to encourage the appropriate separation of waste for recycling and in 2023, an additional focus towards separating bio-waste will be introduced.



Sheep and goats are used to maintain eco-pastures along APRR



Stormwater control basins help manage runoff

Case study



APRR delivers more carpooling options to support emission reduction

In late 2022, two carpooling car parks were opened along the APRR network: one near Dijon and one near Beaune. Carpooling car parks offer customers a meeting point and opportunity to securely park their vehicles and travel in carpool arrangement with others. This reduces costs for customers and the number of vehicles in nearby city centres.

The Beaune site is equipped with electric vehicle charging stations, with a planned link by electric bus to the centre of Beaune. At Dijon, the car park's features include permeable pavers to reduce rainwater runoff, solar street lights, bicycle hoops and a shelter for carpoolers. Additional carpooling car parks are planned in 2023, as part of a €95m construction project on the A43-A41 Chambéry Junction.

Case study



Target met on electric vehicle charging terminals at APRR

With road transport accounting for around 15% of global emissions, Atlas Arteria remains focused on making a positive impact across its global network. In 2022, APRR and AREA met its target to have electric vehicle charging terminals at 100% of its 98 service areas. There are now around 700 charging points for customers across the network. With more than 690,000 electric vehicles on French roads – and sales continuing to grow strongly – this means customers can travel with confidence, knowing they have multiple charging opportunities for their vehicles on the network.

CLIMATE RISKS AND OPPORTUNITIES

Climate change poses risks and opportunities to our business that we must identify and integrate into our decision-making. This year, as well as continuing to address our emissions profile, we have worked to better understand potential climate-related impacts: to our infrastructure, to our people and to our customers and communities.

IN THIS SECTION

- › Our approach to climate risks and opportunities
- › Governance
- › Strategy
- › Risk management
- › Top risks and opportunities
- › Metrics and targets



Our approach to climate risks and opportunities

We are committed to playing our part in reducing our emissions in line with the Paris Agreement. Our scope 1 and 2 emission reduction targets were developed in line with a 1.5 degree warming scenario.

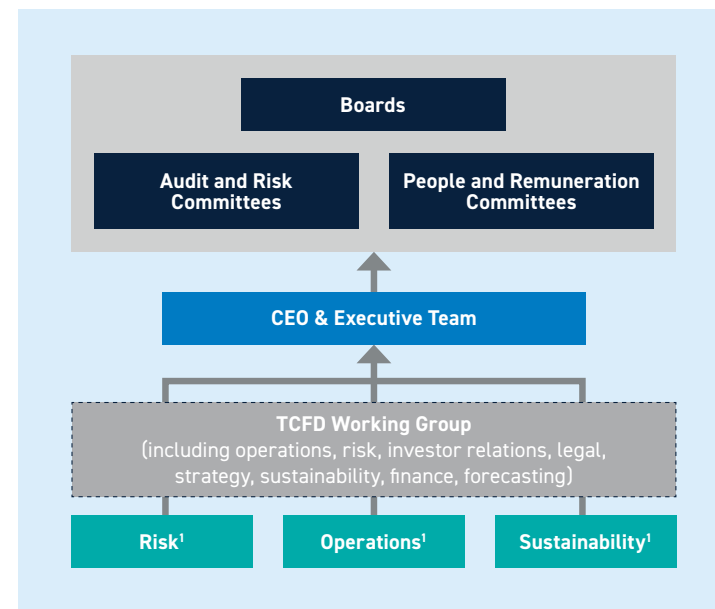
We are utilising the Taskforce on Climate-related Financial Disclosures (TCFD) recommendations to guide our approach to identifying, assessing and disclosing on climate-related impacts on the business. A three-year roadmap to alignment with TCFD was developed based on the results of a gap analysis undertaken during 2021. This year was the first in that multi-year program towards addressing the TCFD recommendations.

During 2022, we focused on identifying and analysing climate-related risks and opportunities and formalising the structures necessary to embed oversight within the business. This section summarises our progress and approach.

Governance

Climate-related roles and responsibilities are recognised throughout Atlas Arteria. This flows down from the Boards and their Committees (who maintain ultimate oversight over environmental, social and governance-related matters, including climate-related issues) through the Executive Team and TCFD Working Group, to key business functions.

Atlas Arteria's climate-related governance structure is shown below, along with a description of associated key roles and responsibilities. Further information on Atlas Arteria's governance structures can be found in [Atlas Arteria's 2022 Corporate Governance Statement](#).



Business function	Responsibilities
ATLAX and ATLIX Boards	<ul style="list-style-type: none"> – Oversees and approves sustainability strategy, including monitoring climate-related risks and opportunities. – Reviews, approves and, where relevant, monitors progress towards environment and sustainability targets (including climate-related targets), sustainability reporting (including climate-related reporting), methodologies for assessing and evaluating climate-related risks and opportunities and the Environment & Social Responsibility Policy. – Sets the risk appetite within which Atlas Arteria is expected to operate. – Oversees and monitors the implementation and adequacy of Atlas Arteria's Risk Management Framework and reviews Atlas Arteria's risks (including climate-related risks), and approves the Risk Management Policy.
Audit & Risk Committees	<ul style="list-style-type: none"> – Reviews and assesses the effectiveness of the Risk Management Framework (including monitoring compliance with policies and procedures within the framework), with implementation overseen and monitored by the Boards. – Reviews the Risk Appetite Statement and Risk Management Policy, which is approved by the Boards. – Oversees Atlas Arteria's approach to identifying and addressing key risks, including climate-related risks (both existing and emerging); and for reviewing such risks. – Responsible for overseeing external audits. – Reviews the Committee's annual program to ensure there is adequate time for the consideration of climate-related risks (both existing and emerging). – Oversees and assesses the Executive Team's control systems around climate-related risks.
People & Remuneration Committees	<ul style="list-style-type: none"> – Reviews and provides recommendations to the Boards on remuneration structure and policies, including climate-related performance measures, where appropriate.

1. Business functions with key climate change responsibilities.

Business function	Responsibilities
CEO & Executive Team	<ul style="list-style-type: none"> – The CEO is responsible for implementing the TCFD recommendations and delivering on climate change responsibilities, including monitoring performance against targets. – The CFO has oversight of the sustainability and climate change agenda across Atlas Arteria. – The Executive Team guides business strategy, risk management processes and investment decisions, and approves key methodologies to assess climate-related risks and opportunities, which are then reviewed and approved by the Boards. – The Executive Team is responsible for reporting climate-related issues to the Boards.
TCFD Working Group	<ul style="list-style-type: none"> – The TCFD Working Group is a cross-functional group responsible for identifying climate-related risks and opportunities, co-ordinating business responses and supporting disclosure in line with the TCFD recommendations.
Sustainability	<ul style="list-style-type: none"> – Responsible for driving the identification of climate-related risks and opportunities across the business and preparing sustainability reporting and climate-related disclosure in line with the TCFD recommendations. – Coordinates and supports business functions in identifying, integrating and addressing climate change considerations, including in setting and achieving GHG emissions reduction targets. – Guides climate change strategy. – Supports internal (including Board) awareness and knowledge development. – Responsible for reporting findings of the TCFD Working Group to the Executive Team.
Risk	<ul style="list-style-type: none"> – Monitors alignment of climate-related risk assessment and reporting processes with Risk Management Framework. This includes consideration of Atlas Arteria's impact on the climate, as well as the climate's impact on Atlas Arteria. – Monitors alignment of assessment and evaluation of risks and opportunities with Risk Appetite Statement. – Responsible for guiding the TCFD Working Group's assessment of risks and reporting to the Executive Team on the matters outlined above.
Operations	<ul style="list-style-type: none"> – Responsible for identifying, assessing, responding, managing and maintaining processes and mitigation plans to address business-level climate-related risks or pursue climate-related opportunities. – Responsible for implementation of GHG emissions reduction strategy to meet targets. – Responsible for advising the TCFD Working Group on the matters outlined above.

In 2022, the Boards considered climate-related issues as we progressed our identification and analysis of associated risks and opportunities. A regular cadence for reporting climate-related issues to the Boards and its Committees has been established, including through monthly management reports, annual ESG updates and annual risk reviews.

In addition, each year the Atlas Arteria Boards assess the key competencies, experience, personal attributes and knowledge that are priorities to have represented on the Boards. The competency of the current Board members are assessed against these experience and knowledge requirements in order to identify and address any gaps or weaknesses, e.g. through relevant succession planning and/or support from external expertise. Experience in developing policies, strategies and initiatives in relation to climate change (and other sustainability initiatives) is specifically identified in this regard as outlined in our 2022 Corporate Governance Statement.

An important development in our climate change approach in 2022 was the establishment of a TCFD Working Group as a key component of our climate governance structure. Established to inform the identification and analysis of climate-related issues and led by Sustainability and Risk functions, the working group includes representatives from key business areas across Atlas Arteria, including operations, risk, investor relations, legal, strategy, sustainability, finance and forecasting. The group provides a forum for analysing and evaluating climate-related issues, exchanging insights, and ensuring clear communication of climate-related issues from the business functions through to management and the Boards.



Strategy

As a global owner, operator and developer of toll roads across three countries with concession end dates of up to 2104, climate change has the potential to affect our businesses, customers and communities. Increasing extreme weather events may impact our businesses, or influence road use. The transition of the global economy to a low-carbon model, may result in increased regulatory pressures and other stakeholder expectations, influencing costs of adaptation. Conversely, climate change may also offer opportunity to our business, with potential access to new markets and opportunities as a result of progressive and proactive environmental action. Through our TCFD journey, we seek to enhance our understanding of these risks and opportunities, effectively embedding considerations into our corporate strategy and future plans.

This year, we have worked to identify and assess potential physical and transition climate-related risks and opportunities relevant to Atlas Arteria. Physical risks arise from changes to the climate, e.g. due to more extreme and/or frequent weather events. Transition risks result from changes to policy, regulation, expectations, etc. in a world seeking to transition to a low-carbon economy. Through the assessment, we considered impacts both at a corporate level and at each of our business locations.¹

Desktop analysis and research was used to identify a long list of potential climate-related risks and opportunities relevant to Atlas Arteria. These were refined through a series of interviews and workshops with subject matter experts from across our corporate and subsidiary businesses. Their expertise was utilised in identifying and prioritising relevant climate-related risks, supported by our risk management framework and scenario analysis.

Scenario analysis was undertaken across three time horizons: the short (2030), medium (2040) and long term (2050). The time horizons were chosen as being most relevant to our concession lengths, excluding Chicago Skyway, which was not under ownership when the assessment was conducted. The assessment allows us to examine the potential future impacts of identified risks and begin to consider the resilience of our businesses under varying conditions.

The 2030 horizon allows assessment of the immediate exposures of Atlas Arteria to climate-related risks and opportunities; 2040 to assess the mid-term evolution of risks and opportunities; and 2050 to provide visibility over the longer-term effects that might substantially change the materiality of key risks and opportunities. The assessment aligns with the parameters of the Group Risk Management Framework for consistency.

The analysis provides the first qualitative assessment of the potential impacts of climate-related risks and opportunities on our business and operations. From here we can better consider where additional investigation and/or resource is required to establish appropriate adaptation and mitigation measures, and where it may be relevant to establish potential financial impacts to better inform decision-making. We will continue to assess the materiality of these risks as we refine our analysis and further integrate the TCFD recommendations into our operations.

Defining climate scenarios

Scenario analysis drew on relevant information from the Intergovernmental Panel on Climate Change (IPCC) for physical risks and the Network for Greening the Financial System (NGFS) for transitional risks. Additional insights from the International Energy Agency (IEA) were also incorporated into the transition risk assessment.

For physical climate risks, we used the latest data from the IPCC's Representative Concentration Pathways (RCPs), specifically looking at RCP 2.6 (low emissions) and 8.5 (high emissions). The RCPs describe different levels of greenhouse gas concentration trajectories and the associated physical impacts that may occur in the future.

Climate modelling was undertaken to support the assessment of physical climate risks, providing insight into possible changes in the environment. Based on data availability and motorway attributes, we explored possible future business impacts arising from key climate-related variables, including flooding, wind speed, snowstorms, extreme precipitation, landslide, and heatwaves. Business impacts could include increased maintenance and repair costs, reduced revenue (e.g. due to inaccessibility of the motorways or reduced customer use), or increased health and safety risks to customers and employees.

For transition risks, scenario analysis drew on information from the NGFS, utilising the Net Zero and Current Policies scenarios. Each scenario presents a different set of considerations, for example on climate policy, emissions and temperature. An overview of these two scenarios is presented below.

NGFS Climate change scenario overview

Orderly transition (net zero)	Hothouse world (current policies)
Early, ambitious action to support the transition to a net-zero CO ₂ emissions economy. This pathway assumes that policies and technological actions are adopted in a coordinated and timely manner, reflecting a policy ambition to limit temperature increase to 1.5°C.	Limited action, resulting in continued global warming and significant increases in exposure to physical risks. This includes a current policies scenario, resulting in potential temperature increases of 3°C+.

1. This excludes Chicago Skyway, which was not under ownership at the time of the assessment. Chicago Skyway will be integrated into the assessment process as we go forward.

Risk management

Sustainability-related risks, including those associated with climate change, are identified, assessed, monitored and integrated into our business strategy in accordance with our Group Risk Management Framework. The Risk Management Framework also considers environmental consequences of business and strategic risks in the risk assessment process.

The ATLAX and ATLIX Boards are responsible for ensuring the effectiveness of the Risk Management Framework, including that it deals adequately with contemporary and emerging issues, and reporting systems are adequate. The Boards are assisted by the Audit and Risk Committees, who oversee the design and implementation of the Risk Management Framework and related policies and procedures. Charters for the Boards and ARC are available on the Atlas Arteria website. Our 2022 Annual Report provides additional information on our approach to risk management.

In 2022, our TCFD work has expanded our understanding of, and helped identify, potential climate-related risks – the following section outlines some of the priority climate-related risks and opportunities identified. Going forward, our focus is to appropriately embed the identification, assessment, and review processes of climate-related risks into business practices, both at the corporate and individual business levels. Importantly, we will develop targeted risk responses and disclose on these.

Top risks and opportunities

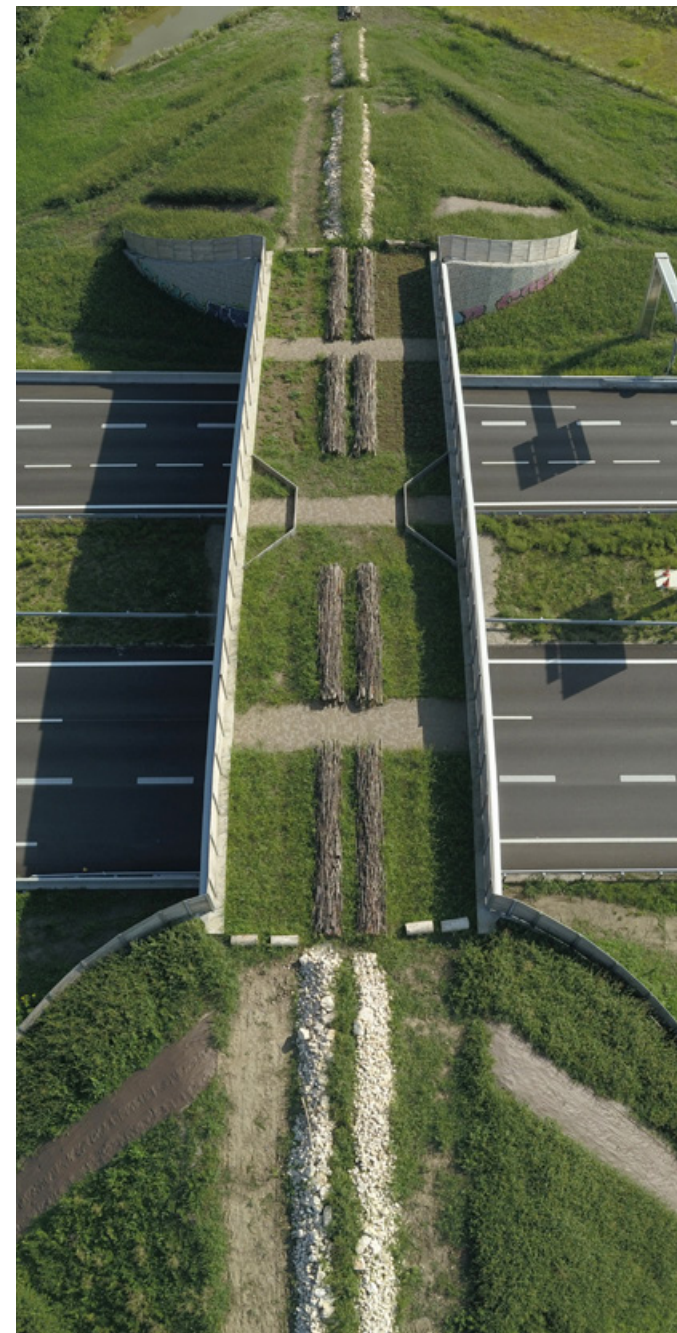
Our risk and opportunity analysis considered APRR Group (including AREA and A79) and ADELAC in France, Dulles Greenway in the US, and Warnow Tunnel in Germany. Across physical risks, a series of both chronic and acute risks were identified that could impact our operations. We explored risks associated with supply chain disruptions, geotechnical ground movements, changed wind patterns, major flooding, and more extreme and/or frequent weather events such as snowstorms, heatwaves and hurricanes. We have considered potential impacts to infrastructure as well as to employee and customer health and safety and customer use of our roads.

For transition risks, we considered market, policy and legal, reputation and technology risks. This included changes in customer behaviour, changes in energy prices and availability, emergence of new regulations, increasing stakeholder expectations and ineffective management of our greenhouse gas emissions profile.

Converse to the potential threats presented to the business, opportunities may also arise. This is particularly true as the transition towards a net-zero economy occurs. Potential opportunities include accessing new markets and capital as a result of increased trust and enhanced reputation; proactive action to improve asset resilience; and cost-savings associated with reductions in energy use and GHG emissions.

Based on the assessment to date, top physical and transition risks and opportunities, and potential impacts on the business, are outlined in the tables on the following pages. These are considered to present the greatest potential climate-related threats or opportunities to the business. Risks have been assessed based on the modelling undertaken to date, and reflecting the likelihood of the risk event based on the definitions within Atlas Arteria's risk assessment matrix. Likelihood ratings include: rare, unlikely, possible, likely and almost certain.

Based on our review to date, we do not expect the risks to materially affect our business strategy in the short to medium term; noting that these – and other risks – will be subject to further investigation and review as we embed our approach into risk management processes and as we consider quantifying potential financial impacts.



Climate-related risks and opportunities		Relevance and impact to Atlas Arteria
Key physical risks	Major flooding impacts on our roads	<p>Risk description: due to increased rainfall, flooding or sea-level rises, there is a risk that our roads are inaccessible and/or damaged, which may result in reductions in traffic due to restricted use or availability of the road. Primary risk associated with surface flooding impacts.</p> <p>Mid-term (2040) assessment of risk likelihood¹: Possible</p> <p>Potential impacts</p> <ul style="list-style-type: none"> – Damage to infrastructure, with associated repair/reconstruction costs. – Increase in ongoing maintenance costs, e.g. due to draining flood impacted roads. – Increased insurance premiums or inability to insure in particular locations. – Temporary loss of use of motorway sections or extended travel delays, due to direct impacts on our infrastructure and/or impacts to surrounding networks, leading to reduced revenue. <p>Possible mitigants and responses</p> <ul style="list-style-type: none"> – Well designed, high quality road networks. – Weather monitoring procedures with established pre and post-event maintenance processes and knowledge of higher-risk areas for effective management. – Monitoring of drainage systems to identify required upgrades or improvements. – Program of infrastructure upgrades and renewals (e.g. pavement renewal) that can be adapted depending upon threats identified.
	More extreme and frequent heatwaves/extreme heat impacts on our roads	<p>Risk description: due to more extreme and/or increasingly frequent heatwaves, there is a risk that our roads are damaged, which may result in significant reductions in traffic due to restricted use or availability of the road.</p> <p>Mid-term (2040) assessment of risk likelihood¹: Possible</p> <p>Potential impacts</p> <ul style="list-style-type: none"> – Increased cost of repair and maintenance of existing roads, as heat exposure reduces durability of building materials. – Increased potential for wildfires due to extended extreme heat, with associated infrastructure damage and traffic impacts. – Reduced traffic due to reduced customer travel and limited or no access to roads as a result of infrastructure damage. <p>Possible mitigants and responses</p> <ul style="list-style-type: none"> – Existing asphalt mix and design can withstand high temperatures. Consider improvements, where relevant. – Monitoring of pavements during heat events. – Preventive maintenance to reduce effects. – Preventive clearing to limit wildfire, in partnership with fire authorities.
	Health and safety of employees and customers due to climate change	<p>Risk description: due to more extreme weather events, including extreme heatwaves, cold or severe storms, there is a risk that customer and employee safety on motorways is compromised, with greater occurrence of road accidents, reduced road usage and employees and contractors not able to perform their roles.</p> <p>Mid-term (2040) assessment of risk likelihood¹: Possible</p> <p>Potential impacts</p> <ul style="list-style-type: none"> – Increased frequency and/or severity of customer accidents due to increasing unsafe driving conditions. – Increased frequency and/or severity of employee injuries due to weather conditions and increased customer emergencies or emergency maintenance. – Potential delays to repair, maintenance or construction to ensure health and safety of employees and contractors in inclement weather. – Less travel in dangerous and/or uncomfortable (e.g. heatwave) conditions leading to less revenue. <p>Possible mitigants and responses</p> <ul style="list-style-type: none"> – Monitoring and communication of adverse weather conditions and safe driving behaviours. – Proactive maintenance to infrastructure to limit damages and safety risks. – Operational inspections to ensure safe roads. – Employee safety training, awareness and culture for severe weather events. – Where relevant, adapt working schedules and procedures; modify personal protective equipment.

1. Likelihood of the event occurring, as assessed under the worst-case climate scenario. Likelihood categorisation is based on the Atlas Arteria Risk Assessment Matrix which includes categories of Rare, Unlikely, Possible, Likely and Almost Certain.

Climate-related risks and opportunities		Relevance and impact to Atlas Arteria
Key transition risks	Emergence of new regulations relating to climate transition	<p>Risk description: due to increased government regulation aimed at constraining climate impacts and/or promoting adaptation of low-emission alternatives, there is a risk of additional operating costs, taxes and/or unanticipated capital expenditure, resulting in unplanned costs and lower distributions to investors.</p> <p>Mid-term (2040) assessment of risk likelihood¹: Likely</p> <p>Potential impacts</p> <ul style="list-style-type: none"> – Increased operating costs, taxes or capital expenditure required to adapt to or meet new requirements. – Reputational and financial risk associated with lack of compliance. – Increased cost of living for customers, leading to reduced travel and reduced revenue. <p>Possible mitigants and responses</p> <ul style="list-style-type: none"> – Staying abreast of regulatory developments and requirements. – Proactive efforts to be part of the solution, e.g. working with others to develop and/or facilitate low-carbon alternatives.
	Ineffective management of emissions profile	<p>Risk description: due to an inability to abate emissions from business operations, there is a risk of incurring fines or penalties from legislative (local, state or national), concessionaire or listing rule breaches, with associated loss of stakeholder support/confidence.</p> <p>Mid-term (2040) assessment of risk likelihood¹: Possible</p> <p>Potential impacts</p> <ul style="list-style-type: none"> – Potential for penalties or fines for failing to adequately manage emissions, as price of carbon significantly increases under a net-zero scenario. – Increased costs to manage and improve emissions disclosures. – Restricted access to debt, insurance or new opportunities as a result of reputational damage. – Loss of investor support, leading to reduced security price and lack of access to capital. <p>Possible mitigants and responses</p> <ul style="list-style-type: none"> – Scope 1 and 2 GHG emissions reductions targets established. Additional work ongoing to understand and address scope 3 emissions. – Pursuit of energy and GHG reduction initiatives within our businesses. – Keeping informed of regulatory and policy requirements and changes and remaining proactive in approach.

1. Likelihood of the event occurring, as assessed under the worst-case climate scenario. Likelihood categorisation is based on the Atlas Arteria Risk Assessment Matrix which includes categories of Rare, Unlikely, Possible, Likely and Almost Certain.

Climate-related risks and opportunities		Relevance and impact to Atlas Arteria
Climate related opportunities	Access to new business and capital due to increased trust and reputation	<p>Opportunity description: due to progressive action being taken to address and/or reduce climate change impacts, there is an opportunity to access new markets and opportunities by meeting/exceeding government and other partner aims.</p> <p>Mid-term (2040) assessment of opportunity likelihood¹: Possible</p> <p>Potential impact</p> <ul style="list-style-type: none"> – Improved opportunity to win new projects, e.g. through alignment with government aims by demonstrating minimisation of environmental impacts (especially in greenfield) and commitment to climate action. – Improved security price through meeting investor expectations and outperforming competitors, leading to improved ability to raise capital and equity for new projects. – More desirable partner, e.g. for joint ventures, providing improved access to opportunities. <p>Possible catalysts</p> <ul style="list-style-type: none"> – Delivery of Atlas Arteria's Sustainability Strategy. – Identifying, developing and delivering innovations towards a low-carbon future. – Effective communications and working relationships with governments and partners.
	Significant cost savings through reductions in energy use and GHG emissions	<p>Opportunity description: due to proactive action to reduce energy use and scoped GHG emissions, there is an opportunity to reduce costs as traditional resources become more expensive; and to reduce exposure to potentially significant costs associated with climate-related regulation, e.g. carbon taxes.</p> <p>Mid-term (2040) assessment of opportunity likelihood¹: Possible</p> <p>Potential impact</p> <ul style="list-style-type: none"> – Cost savings from reduced energy consumption. – Cost savings through accessing subsidies/incentives for low emission sources. – Improved trust and reputation through effective management. – Reduced exposure to penalties such as carbon taxes. <p>Possible catalysts</p> <ul style="list-style-type: none"> – Scope 1 and 2 GHG emissions reductions targets established. Additional work ongoing to understand and address scope 3 emissions. – Pursuit of energy reduction initiatives within our businesses. – Keeping informed of regulatory and policy changes and remaining proactive in approach.

1. Based on the perceived size of opportunity and Atlas Arteria's ability to execute.

Metrics and targets

In addition to managing the impacts of climate change on our businesses, we recognise the importance of managing our impacts on the climate. We assess our GHG emissions following the GHG Protocol Corporate Standard using the equity share approach. We are committed to reducing our emissions and in 2021, we established targets to reduce our scope 1 and 2 emissions by 25% by 2025 and 46% by 2030, compared to a 2019 baseline. These targets are consistent with a 1.5°C decarbonisation pathway and calculated using a methodology that is consistent with the Science Based Targets Initiative (SBTi). Detail on our GHG accounting and actions can be found in the [‘Environmental stewardship’ section](#).

In 2022, we completed a scope 3 baseline (2019) emissions assessment for corporate and wholly-owned businesses. APRR is currently completing a scope 3 assessment and Chicago Skyway is beginning its journey for GHG accounting in 2023. This is a key step to understanding and managing our value-chain emissions. Moving forward, we will look to expand our scope 3 inventory and continue integrating the TCFD recommendations into business practices.



ADDITIONAL INFORMATION

IN THIS SECTION

- › Metrics
- › SASB Index
- › Glossary

METRICS

SAFETY

		APRR	Warnow Tunnel	Dulles Greenway	Corporate
Employee lost-time injury frequency rate	2020	2.66	–	–	–
	2021	2.85	30.07	–	–
	2022	3.46	–	–	–
Employee lost-time injuries	2020	13	–	–	–
	2021	14	2	–	–
	2022	17	–	–	–
'Effective workforce' lost-time injuries ¹	2020			1	
	2021	n/a	n/a	1	n/a
	2022			–	
Employee injury severity rate	2020	0.36	–	–	–
	2021	0.36	0.66	–	–
	2022	0.25	–	–	–
Employee fatalities	2020	–	–	–	–
	2021	–	–	–	–
	2022	1	–	–	–
Contractor lost-time injuries	2020	–		1	–
	2021	1	n/a	1	–
	2022	–		–	–
Contractor fatalities	2020	–		–	–
	2021	–	n/a	–	–
	2022	–		–	–

1. Additional disclosure only applicable to Dulles Greenway. Includes employees and contractors.

HEADCOUNT BY AGE RANGE

		APRR	Warnow Tunnel	Chicago Skyway	Dulles Greenway	Corporate
<26	2020	150	1		–	1
	2021	184	1		–	1
	2022	235	1	1	–	1
26-35	2020	335	9		–	15
	2021	355	10		–	17
	2022	390	11	17	–	15
36-45	2020	654	3		3	10
	2021	590	3		4	19
	2022	600	4	14	6	17
46-55	2020	1,491	9		4	8
	2021	1,435	12		4	10
	2022	1,373	12	18	3	13
56-65	2020	869	14		5	2
	2021	891	11		5	2
	2022	913	9	7	5	2
65+	2020	6	–		2	–
	2021	7	–		1	–
	2022	9	–	2	1	–
Total	2020	3,505	36		14	36
	2021	3,462	37		14	49
	2022	3,520	37	59	15	48

■ Areas shaded in light grey represent no information available.

METRICS

HEADCOUNT BY GENDER

	Corporate			
	M	F	%M	%F
Australian Board	3	2 ³	60%	40%
Bermudian Board	2	3	40%	60%
Boards total¹	5	4	56%	44%
Executive Team	5	1	83%	17%
Senior managers ²	7	7	50%	50%
All others	17	15	53%	47%
Total	29	23	56%	44%

1. Debbie Goodin sits on both the Australian and Bermudian Boards.

2. This includes CEOs and MDs of wholly and majority-owned businesses.

3. Ariane Barker, who retired from the Board on 31 December 2022, is included here.

	APRR				Warnow Tunnel				Chicago Skyway				Dulles Greenway			
	M	F	%M	%F	M	F	%M	%F	M	F	%M	%F	M	F	%M	%F
Subsidiary Boards					3	–	100%	0%	6	2	75%	25%	4	–	100%	0%
Executive Team	8	1	89%	11%	1	1	50%	50%	2	2	50%	50%	1	2	33%	67%
Senior managers	361	172	68%	32%	–	1	0%	100%	4	2	67%	33%	5	1	83%	17%
Other employees	1,875	1,103	63%	37%	14	20	41%	59%	18	31	37%	63%	4	2	67%	33%
Total	2,244	1,276	64%	36%	15	22	41%	59%	24	35	41%	59%	10	5	67%	33%

TRAINING

		APRR				Warnow Tunnel		Dulles Greenway ⁴		Corporate	
Total hours of training	2020	46,389									
	2021	58,123					545				
	2022	74,889				679	1,373				
Hours of training per employee	2020	13.2									
	2021	16.8					14.3				
	2022	21.3				18.4	32.7				

4. Dulles Greenway information based on the 'effective workforce', which includes both employees and contractors.

■ Areas shaded in light grey represent no information available.

METRICS

GHG EMISSIONS

		APRR	Warnow Tunnel ¹	Dulles Greenway	Corporate	TOTAL
Scope 1 (t CO ₂ e)	2020	5,525	11	270	6	5,812
	2021	6,726	13	218	17	6,975
	2022	5,970	13	204	11	6,197
Scope 2 (t CO ₂ e) (location based)	2020	756	332	527	13	1,627
	2021	801	263	383	16	1,462
	2022	706	294	370	43	1,414
Total Scope 1 & 2 (t CO ₂ e)	2020	6,281	343	797	19	7,439
	2021	7,527	276	601	33	8,437
	2022	6,676	307	574	54	7,611
Customer emissions (Scope 3, t CO ₂ e)	2020	1,855,310	1,853 ²	27,718 ²	–	1,884,881 ²
	2021	2,154,292	1,780	31,767	–	2,187,839
	2022	2,388,213	1,851	33,214	–	2,423,278

1. Reported scope 2 emissions at Warnow Tunnel do not account for the business's transition to 100% renewable electricity in 2021. Under market-based calculations, Warnow Tunnel scope 1 and 2 GHG emissions equated to 31 tonnes in 2021 and 28 tonnes in 2022.

2. Restated due to reporting error.

ENERGY CONSUMPTION

		APRR	Warnow Tunnel	Dulles Greenway	Corporate	TOTAL
Natural gas (MWh)	2020	1,443	–	47	33	1,523
	2021	1,544	–	–	93	1,637
	2022	1,559	–	–	59	1,618
Propane and butane (MWh)	2020	102	–	96	–	197
	2021	123	–	84	–	207
	2022	86	–	88	–	174
Kerosene (MWh)	2020	–	–	–	–	–
	2021	–	–	–	–	–
	2022	–	–	8	–	8
Domestic fuel oil (L)	2020	158,267	–	–	–	158,267
	2021	173,978	–	–	–	173,978
	2022	162,252	–	–	–	162,252
Petrol (L)	2020	–	2,231	73,953	–	76,184
	2021	3,165	3,072	57,663	–	63,901
	2022	9,565	2,406	64,006	–	75,977
Diesel (L)	2020	1,330,886	2,219	10,919	–	1,344,024
	2021	1,528,185	2,202	5,610	–	1,535,997
	2022	1,437,967	2,609	7,165	–	1,447,741
Diesel (non-road, L)	2020	99,518	–	3,580	–	103,098
	2021	129,513	–	4,760	–	134,273
	2022	133,737	–	4,270	–	138,006
Electricity (MWh)	2020	18,579	781	1,282	21	20,663
	2021	19,674	766	1,090	21	21,551
	2022	18,582	780	1,006	56	20,424
District heating (MWh)	2020	–	117	–	–	117
	2021	–	131	–	–	131
	2022	–	117	–	–	117
Renewable energy production (MWh)	2020	19	–	neg.	–	19
	2021	13	–	neg.	–	13
	2022	16	–	neg.	–	16

METRICS

WASTE

		APRR	Warnow Tunnel	Dulles Greenway	Corporate ¹
Hazardous waste (t)	2020	117			
	2021	334			
	2022	822			
Non-hazardous waste (t)	2020	8,748			
	2021	9,565			
	2022	19,079			2.2
Inert waste (t)	2020	15			
	2021	–			n/a
	2022	–			
Total waste recycled or recovered (t)	2020				
	2021				
	2022	15,112			0.8
Total waste (t)	2020	8,880			
	2021	9,900			
	2022	19,901			2.2

WATER USE

		APRR	Warnow Tunnel	Dulles Greenway	Corporate
Mains water (m³)	2020	646,391	274		
	2021	627,904	360		
	2022	673,353	273	158	
Extracted water (m³)	2020	8,836	–		
	2021	847	–		
	2022	1,248	–		

1. Waste is reported for global corporate (Melbourne) headquarters and excludes Luxembourg.

■ Areas shaded in light grey represent no information available.

SASB INDEX

The following table presents our reporting against the Sustainability Accounting Standards Board (SASB) sector standards. As an infrastructure owner and operator, Atlas Arteria's listed SASB sector is the Infrastructure: Engineering and Construction Services Standard. For context, it should be noted that while our businesses oversee project development, we do not directly undertake construction activities. We have included reference to all recommended disclosures under this Standard for completeness.

TOPIC	DISCLOSURE	CODE	RESPONSE
Environmental impacts of project development	Number of incidents of non-compliance with environmental permits, standards, and regulations.	IF-EN-160a.1	None.
	Discussion of processes to assess and manage environmental risks associated with project design, siting, and construction.	IF-EN-160a.2	<p>APRR was the sole Atlas Arteria business to undertake significant project development activities in 2022. Environmental impact assessments are undertaken in the planning stage of all major projects to inform and guide project design. These seek to minimise and mitigate potential environmental impacts. We follow the 'avoid, reduce, compensate' hierarchy of actions. As an example of outcomes, dedicated project websites, e.g. for the A480 (https://www.a480rondeau.fr/a480-une-autoroute-integree/) and A6 Chalon Nord (https://a6chalon.aprr.com/l-environnement.htm), identify actions integrated into the design to address environmental concerns.</p> <p>APRR, has dual ISO 9001 and ISO 14001 certifications, the latter providing a structured approach to environmental management and protection.</p>
Structural integrity and safety	Amount of defect and safety-related rework costs.	IF-EN-250a.1	None. Atlas Arteria infrastructure is built by third-party contractors who have responsibility within their contract for defect and safety-related rework.
	Total amount of monetary losses as a result of legal proceedings associated with defect and safety-related incidents.	IF-EN-250a.2	None.
Workforce health and safety	(1) Total recordable incident rate (TRIR) and (2) fatality rate for (a) direct employees and (b) contract employees.	IF-EN-320a.1	<p>Atlas Arteria reports on lost-time injury frequency rate for employees (injuries per one million hours worked) and lost-time injuries for contractors. Our performance over time is presented on page 12. In 2022, the businesses recorded the following:</p> <ul style="list-style-type: none"> – APRR employee LTIFR = 3.46 (LTI = 17) and contractor LTI = 0; – Dulles Greenway employee LTIFR = 0 (LTI = 0) and contractor LTI = 0; and – Warnow Tunnel employee LTIFR = 0 (LTI = 0) with no relevant contractors. <p>One employee fatality occurred at APRR in 2022. Further information is available in the 'Safety' section of this report.</p>
Lifecycle impacts of buildings and infrastructure	Number of (1) commissioned projects certified to a third-party, multi-attribute sustainability standard and (2) active projects seeking such certification.	IF-EN-410a.1	None.
	Discussion of process to incorporate operational-phase energy and water efficiency considerations into project planning and design.	IF-EN-410a.2	<p>APRR's framework requires projects to integrate, from design to construction, energy and water efficiency, as well as protection of water resources.</p> <p>As a road network, pursuing more energy efficient use of the roads (by customers) is a key consideration. Project design pursues initiatives that can enable this, e.g. through the introduction of free-flow tolling on the A79 (with planned introduction on AREA) and testing of new initiatives such as low-rolling resistance asphalt. There is also ongoing review of new and existing assets to improve efficiencies, e.g. optimising asphalt types and replacement cycles; upgrading lighting to LEDs; and improving stormwater control and treatment along the motorways, e.g. as undertaken along the A480.</p> <p>Opportunities are also sought to create positive impact within our design, for example in France, APRR pursues landscaping, with tree planting to improve natural carbon sinks along the motorways.</p>

SASB INDEX

TOPIC	DISCLOSURE	CODE	RESPONSE
Climate impacts of business mix	Amount of backlog for (1) hydrocarbon-related projects and (2) renewable energy projects.	IF-EN-410b.1	Metric not applicable – Atlas Arteria does not construct energy-related projects. In support of a low-carbon future, APRR has partnered with energy organisations, providing space along the motorway network for the development of solar farms. See page 25 for one such example. As an energy consumer, APRR, Warnow Tunnel and our Luxembourg corporate office have now transitioned to 100% renewable electricity.
	Amount of backlog cancellations associated with hydrocarbon-related projects.	IF-EN-410b.2	Metric not applicable – Atlas Arteria does not undertake hydrocarbon-related projects.
	Amount of backlog for non-energy projects associated with climate change mitigation.	IF-EN-410b.3	No major projects, however climate change mitigation and facilitating our customers' transition to lower-carbon options is a priority in our management of the network. Supporting initiatives include: – 100% of service areas along the APRR and AREA networks are now equipped with EV charging stations; – implementation of free-flow tolling, e.g. along the A79, which results in reduced customer emissions compared with toll plazas (see case study on page 14); – installation of carpooling car parks along our motorways and partnerships with local government to support multi-modal hubs; and – lanes reserved for public transport, carpooling and zero-emission vehicles.
Business ethics	(1) Number of active projects and (2) backlog in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index.	IF-EN-510a.1	None.
	Total amount of monetary losses as a result of legal proceedings associated with charges of (1) bribery or corruption and (2) anti-competitive practices.	IF-EN-510a.2	None.

SASB INDEX

TOPIC	DISCLOSURE	CODE	RESPONSE
Business ethics (continued)	Description of policies and practices for prevention of (1) bribery and corruption and (2) anti-competitive behaviour in the project bidding processes.	IF-EN-510a.3	<p>Our Anti-Bribery and Corruption Policy (ABC Policy) and Code of Conduct prohibit bribery and corrupt behaviour in connection with Atlas Arteria's business (including a prohibition on the use of facilitation payments). Further, our Code of Conduct prohibits personnel from engaging in anti-competitive behaviour or business practices that limit, prevent or restrict competition. The ABC Policy and Code of Conduct are supported by our Whistleblower Policy.</p> <p>All corporate employees are required to undertake training on these policies, as well as in relation to the requirements of applicable Competition Laws, within the first 45 days of joining the organisation, with refresher training every two years. Further, we conduct in-person training on these issues and our ABC Policy, Code of Conduct and Whistleblower Policy in our wholly-owned businesses. We have comprehensive and clear communication channels embedded in our organisation to ensure any actual or suspected instances of bribery and corruption and anti-competitive behaviour are appropriately escalated and reported in a timely manner. We also have a due diligence process in place to identify whether potential acquisition targets may have exposure to any bribery, corruption, sanctions or other potential reputational issues.</p> <p>For APRR and ADELAC, we participate in the Capex Committee, which is responsible for overseeing the tendering processes and contract awards. Following review, we are comfortable that APRR conducts business in accordance with governance standards commensurate with our own, including compliance with all laws (i.e. competition laws touching on project bidding, bribery and corruption etc).</p> <p>Our Supplier Code of Conduct requires all organisations that we work with to comply with all applicable laws relating to the prevention of anti-competitive practices and bribery, corruption, fraud or similar or related activities.</p>
Activity metrics	Number of active projects.	IF-EN-000.A	One major project at the A43-A41 Chambéry Junction, as at the end of 2022. A number of small capital projects are also underway at the APRR in France. Further information is available in the 'APRR and ADELAC' section of the 2022 Annual Report.
	Number of commissioned projects.	IF-EN-000.B	During 2022, construction was completed on two major projects at APRR: the A79 and the A480, as well as 12 large wildlife bridges. Further information is available in the 'APRR and ADELAC' section of the 2022 Annual Report.
	Total backlog.	IF-EN-000.C	Two major projects at the A43-A41 Chambéry Junction and A6-Chalons, and remaining five wildlife bridges. A number of small capital projects are also underway at APRR in France. Further information is available in the 'APRR and ADELAC' section of the 2022 Annual Report.

GLOSSARY

TERM	DEFINITION
People	
Contractor	Individuals who are not on Atlas Arteria's payroll, but who are supervised by Atlas Arteria or its businesses on a day-to-day basis, including independent contractors and those employed by third parties (e.g. temp agencies).
Effective workforce	Applicable only at Dulles Greenway, this includes Employees and Contractors at that business. Contractors at Dulles Greenway are engaged throughout the entire year, and on an ongoing basis. This term is of particular relevance to Dulles Greenway's lost-time injury safety target, which encompasses both Employees and Contractors.
Employee	Individual employed and directly paid by Atlas Arteria or its businesses, including permanent employees on full-time and part-time contracts and those on extended leave.
Executive Team	For each business, Executive Team includes: Corporate: CEO, CFO, COO, General Counsel & Company Secretary, Group Executive Corporate Development and Strategy, Group Executive People and Culture APRR: Executive Committee as per the Governance page of the APRR website: https://aprr.com/en/group/governance-and-share-ownership Warnow Tunnel: joint Managing Directors Chicago Skyway: CEO, General Counsel, COO, Vice President of IT. CFO had not yet been appointed by Atlas Arteria and Ontario Teachers' as at 31 December 2022. Dulles Greenway: CEO, CFO, COO
Headcount	Total number of individuals working for, and directly paid by Atlas Arteria or its businesses, including permanent employees (full-time, part-time, on extended leave), as at 31 December. Corporate headcount also includes fixed-term contractors.
Senior managers	For Corporate, Warnow Tunnel, Chicago Skyway and Dulles Greenway, this includes direct reports to Executive Team members in senior roles as at 31 December 2022. For corporate reporting, the MDs and CEOs of wholly and majority-owned businesses are also represented within this definition (i.e. as direct reports to the CEO). At APRR, this constitutes all employees categorised as ' <i>cadres</i> ', i.e. all employees included in classes I to P per the 'National collective agreement of concessionary companies or operators of motorways or road works of June 27, 2006'.
Sub-contractor	A third-party individual or business contracted by Atlas Arteria or its businesses to complete a specific task or tasks. Work is carried out independently, i.e. without day-to-day supervision by Atlas Arteria or its businesses.
Safety	
Injury severity rate	The number of days lost due to workplace injuries multiplied by 1,000 and then divided by the total number of hours worked, over a 12-month period to 31 December 2022.
Lost time injury (LTI)	Any work-related injury or illness of an Employee or Contractor resulting in one or more full scheduled days (or shifts) lost, other than the day (or shift) on which the injury occurred.
Lost time injury frequency rate (LTIFR)	The number of work-related lost-time injuries within a 12-month period, relative to the total number of hours worked in that period. This is calculated as: Number of work-related lost time injuries in the report period, multiplied by one million and then divided by the total hours worked in the reporting period.

GLOSSARY

TERM	DEFINITION
Greenhouse gas emissions	
Greenhouse gas accounting	Greenhouse gas emissions have been calculated based on the Equity Share approach in the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard. Values represent 31.14% of APRR (including AREA) emissions, and 100% of Dulles Greenway, Warnow Tunnel and corporate emissions. Chicago Skyway is not included in reporting for 2022.
Scope 1	Greenhouse gas emissions derived from natural gas, fuel use and refrigerants directly used by Atlas Arteria or its businesses, and calculated based on an equity share approach. For all businesses except APRR, emission factors for fuels are sourced from Australian National Greenhouse Accounts (2022) and emission factors for refrigerants are sourced from BEIS (Department for Business, Energy & Industrial Strategy, 2022 UK). For France (APRR, including AREA) emission factors are based on ADEME.
Scope 2 (location-based emissions)	Greenhouse gas emissions associated with the consumption of purchased electricity and district heating by Atlas Arteria or its businesses, and calculated based on an equity share approach. Emission factors for each location are based on average emissions intensity of the grid. Australian emissions are based on emission factors sourced from the National Greenhouse Accounts (2022). All other countries (France, US, Luxembourg and Germany) are based on International Energy Agency (IEA) factors (2022 release).
Scope 2 (market-based emissions)	Greenhouse gas emissions associated with the consumption of purchased electricity and district heating by Atlas Arteria or its businesses, and calculated based on an Equity Share Approach. For all businesses except Warnow Tunnel, market-based emissions are assumed to be equal to location-based emissions, in the absence of available localised information at this time. At Warnow Tunnel, market-based emissions are reduced to reflect the impact of green power purchases made.
Scope 3 (customer emissions)	Indirect greenhouse gas emissions associated with customer use of the business's motorway networks. Scope 3 emissions are not owned or controlled by Atlas Arteria and have been calculated based on the data gathered from customer distance travelled and type of vehicle and utilising emission factors sourced from BEIS (2022) for passenger and delivery vehicles.
Targets	Atlas Arteria's greenhouse gas emission reduction targets are based on the market-based methodology. The 2019 baseline was calculated using location-based emission factors for each of our businesses in the absence of more localised information.
Other environment	
Hazardous waste	Wastes that have the potential to cause great harm to humans or the environment, e.g. road containing asbestos.
Inert waste	Hard waste that has a negligible effect on the environment, e.g. concrete.
Non-hazardous waste	Non-inert and non-hazardous waste, e.g. plastics, wood, paper, metals and glass.
Total waste recycled or recovered	The total volume of waste (including hazardous, inert and non-hazardous) that has been diverted from landfill for recycling, or recovered e.g. through waste to energy processes.



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Page 4 – A480: Christoph Weller
Page 7 – Chicago Skyway: MILLER+MILLER
Page 11 – APRR: Robin Nicolas
Page 14 – Warnow Tunnel: Thomas Ulrich
Page 14 – APRR: Semaphore and Co
Page 15 – Run the Greenway: Swim Bike Run Photos
Page 17 – Dulles Greenway
Page 18 – Run the Greenway: Swim Bike Run Photo
Page 19 – Andrew Craig Photography
Page 20 – APRR: Leimdorfer Gilles
Page 21 – APRR: Pierre Augier

Page 22 – Andrew Craig Photography
Page 23 – APRR: Christophe Huret
Page 25 – APRR: Erolf Productions
Page 26 – APRR
Page 26 – A41: Sémaphore & Co
Page 27 – APRR
Page 27 – APRR: Erolf Productions
Page 28 – Warnow Tunnel: Trent Perrett Photography
Page 31 – Ecopont-A48: Romain Courtaud
Page 35 – Chicago Skyway
Page 36 – Dulles Greenway: David Madison Photography