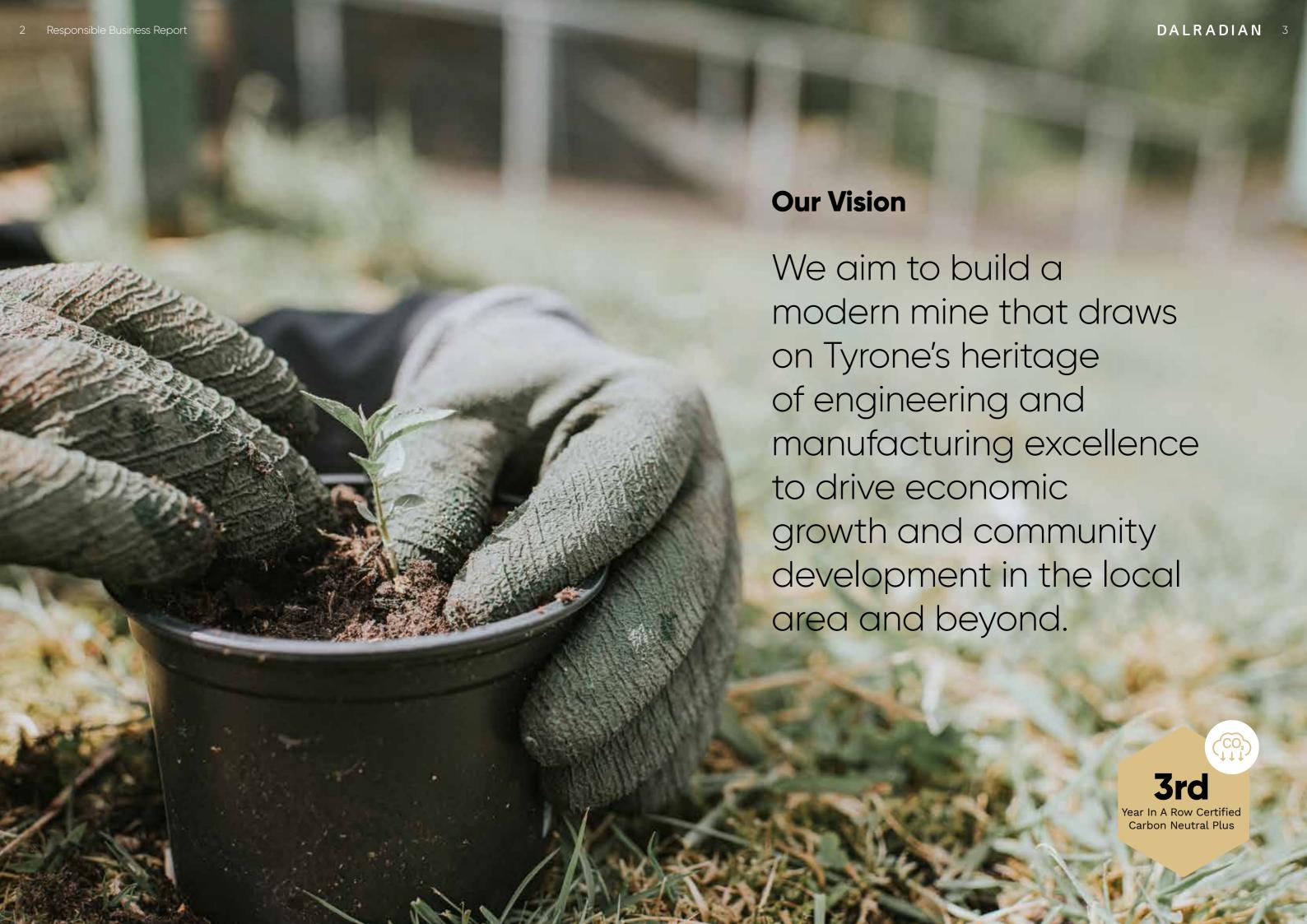
# DALRADIAN





2021 Responsible Business Report



Dalradian's 2021 Responsible Business Report explains the company's business, strategy, activities and performance in a number of areas, including environmental, social and governance for the period January to December 2021.

The report includes key metrics and case studies that illustrate Dalradian's long-term, responsible approach to modern mining.



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Supported by US investment, Dalradian has been working in West Tyrone for more than 12 years, advancing its project which contains a mineral deposit of gold, silver and copper. The regionally significant project is currently moving through the planning process, with the aim of being one of the world's top underground mines utilizing the best available technology for modern mining.

In addition to precious metals, Dalradian has also been actively exploring throughout its licence area since 2010 for base metals, rare earths and other critical minerals.

"Orion are showing great confidence in Northern Ireland, our high grade Curraghinalt project and our West Tyrone workforce. Their goals as strategic investors are completely aligned with ours - to secure planning permission for an underground gold mine and continue advancing the project in a way that benefits all our



Patrick F.N. Anderson President & CEO Dalradian Resources Inc.

"We are very pleased to expand our ownership in one of the world's best undeveloped gold deposits. Curraghinalt gets more exciting as additional exploration and engineering work is completed. We look forward to working with the core Dalradian management team to secure planning permission for a world class mine using best-inclass mining, processing and environmental standards."



Oskar Lewnowski Chief Executive Officer of Orion



# CEO **Foreword**



Over the past 13 years our project has advanced from a small early-stage exploration project to what will be a world class mine, currently in the final stages of planning. This progress is the result of a three-way partnership between our local team in Omagh, the Canadian mining expertise of Dalradian's founders and the specialist financial experience of our US owners, Orion.

In the summer of 2022, we marked the 4-year anniversary of Orion's investment, which has totalled \$360 million to date, including support to continue to advance the project. Orion joins an extensive list of US firms that have invested £1.5 billion in NI over the past decade as the region's leading source of FDI, creating c.13,000 jobs in the process, according to Manufacturing NI.

Once the planning and permitting processes are successfully completed (the next step is a public inquiry to be held by the Planning Appeals Commission), work on constructing the mine, which will take 18-24 months, can begin. Over a 25-year period of operation, the project will produce 15,000 tonnes of copper, 3.5 million ounces of gold and 850,000 ounces of silver - minerals which are fundamental to support the growth in renewable technologies which the transition to Net Zero will depend upon.

The next stage of the project - construction and operation - represents a total investment of c.\$1.3 billion by Orion, via Dalradian. During operation, 1,000 direct, indirect and induced jobs will be created, a tremendous boost for the regional economy. Several hundred additional jobs will also be created in the construction stage.

Although US-owned, this project will be developed and operated in NI by an overwhelmingly local work force. To help deliver on this commitment, we are planning a three-year, £15m training programme to run alongside preparatory work for the mine's opening. Dalradian has already received over 3,500 expressions of interest in future jobs at the mine. Existing skills in the local region in construction, engineering and farming are well-suited to the mining industry.

Without a doubt, we have suffered from the malaise that has affected all major projects going through the planning system in Northern Ireland. What the government promises investors will take approximately 6 months is stretching close to 5 years. And we are not unique! As set out in the NI Audit Office report and the CBI/MacKinnon reports. Northern Ireland's planning system is failing all parties and needs a major overhaul.

Notwithstanding this challenge, we are confident in a positive outcome at the public inquiry. We have proposed an outstanding project based on a world class mineral deposit that is to be developed and operated using industry best practices, including robust environmental protections. We appreciate the patience of our employees, contractors, suppliers and community champions as they have continued to support the project and move it forward during this protracted permitting period.

We are not asking the people of Northern Ireland or the government to solely rely on our promises for the future. Instead, they can examine our record after 13 years of operation and observe our approach to working with the people and environment surrounding our project. Our achievements to date - moving from a standard Investors in People status to Gold status in 2022, supporting more than

600 community projects, being certified as Carbon Neutral Plus for the third year in a row and maintaining a rock-solid performance in both Health & Safety and Environment - have come about because of the efforts of the great team we have on the ground in Northern Ireland supported by the strong backing of our North American owners and management team. That openness to scrutiny is why we have welcomed more than 1,600 members of the public to visit our project to date. On these "Tunnel Tours", they've been able to meet our people and see for themselves how we operate and what our proposals look like in more detail. These and other conversations with diverse stakeholders have advanced local understanding of modern mining and also improved the project - feedback has been incorporated into our proposals to make the project even better.

We are hoping to have a schedule soon for the Public Inquiry process, which we have welcomed from day one. We look forward to a successful conclusion to the process and moving on to delivering on the brilliant opportunities our project will bring to the region.



# MD **Foreword**



In 2021, our efforts remained focused on advancing our application to build a modern underground gold-silver-copper mine through the Northern Ireland planning system. Our application is regionally significant and has been shared with statutory consultees, who, along with feedback from the public, have contributed to the evolution of the application since it was first submitted in November 2017.

Almost five years since that date, our application remains within the planning system. Two reports released earlier this year, one from the Northern Ireland Audit Office and the other from the Public Accounts Committee were deeply critical of planning in Northern Ireland. The reports concluded failings; only 26% of major and regionally significant planning applications, like Dalradian's, were processed within the targeted 30-week timeframe. A fifth of these applications are still in the system after three years, having an impact not only on applicants but also risking investment in Northern Ireland. It's disappointing that a project like ours, with such transformative economic and social benefits is suffering such long drawn-out delays in progressing through the planning system. That being said, and despite the continuous waiting, we look forward to the Planning Appeals Commission announcing a schedule for the public inquiry. It will be an important milestone for our application, providing an opportunity for further examination of the project by experts and other stakeholders.

Throughout the last year, we remained committed to supporting the community, our staff, engaging with stakeholders and maintaining our environmental work to meet regulatory requirements. Our exploration team continued to explore for a range of metals and minerals, including base metals, critical minerals, rare earth elements and precious metals. With the UK importing over 40 million tonnes of metal per year and recent world events, it's becoming clearer that we can no longer take the global supply chain for granted. The UK is already home to the headquarters of many large mining companies and, with good governance in place it, has the potential to develop an indigenous mining industry, ensuring supply of metals essential to the modern world and society's move to a

For the third consecutive year we were certified as Carbon Neutral Plus by Carbon Footprint, decreasing our emissions by 66.8% measured against the baseline year (2019) and by 16.6% compared to the previous year. Our aim is to build a state-of-the-art



environmentally responsible mine which will be carbon neutral with our plans adapting as we move through each stage - from permitting, construction and operations through to closure - and as technology advances. Through our carbon management plan, we are constantly looking at how we can reduce our carbon emissions today whilst planning for the future mine. We offset the remainder of our emissions through international certified projects aligned to the Sustainable Development Goals established by the United Nations in 2015. This year we supported a methane reduction/energy production project in Bulgaria as well as contributing locally through planting 227 native trees across Northern Ireland. In addition, we have also started the development of a tree nursery with species native to our project area.

Although this report covers 2021, it's important to mention our recent Investors in People award. We first obtained the standard IIP accreditation in 2019 and we're delighted to have been recertified with the gold accreditation, scoring the 2nd highest in our industry sector globally. We are fully committed to developing our team and this award is testament to them and the culture we are creating at Dalradian.

Our goal of building and operating a worldclass modern mine in Tyrone is one step closer. We look forward to concluding the permitting stage of the project and beginning construction of a hi-tech, environmentally responsible mine that will bring quality jobs to the area. This is a once-in-a-generation opportunity that will be transformative for Tyrone and beyond.

#### The Institute of Geologists of Ireland (IGI)

The Institute of Geologists of Ireland (IGI) published a series of sciencebased factsheets on mineral and mining on the island of Ireland. Their aim is to raise awareness of the "role of mineral exploration and mining in meeting Ireland's future societal, economic and environmental needs."

To read the IGI factsheets on Mining through the Ages, Mineral Exploration in Ireland, Lifetime Value of a Mine, Mine Planning and Environmental Oversight and Mining and Our Green Future visit www.igi.ie/ committees/minerals-information-working-



# People

Our project will benefit the local community. The experience of other mines demonstrates the prosperity that modern mining can bring to the areas in which they operate. Mines within the Republic of Ireland are great examples: they have upskilled local people, helped communities thrive and created opportunities for other businesses, all while respecting the environment.





Tyrone and Fermanagh district is the largest geographically of the eleven council districts in Northern Ireland but has the smallest population. Almost 50% of the population live in rural countryside. People in the area have travelled outside the district to work for decades. Our hope is to create jobs locally and relieve pressures on families. Based on the experience of other mines, Dalradian expects to hire around 90% of our staff from the local area. This will be supported with the investment of a £15 million training programme over the initial three years to assist local people qualify for positions at the mine. That means people will see their families at teatime, rather than waiting for the weekend and holidays.

It means more money will be spent in local businesses, boosting employment prospects across the whole of the economy. It's the start of a virtuous cycle - a cycle that can be built upon, making our community stronger.

The people of Tyrone and Fermanagh have a fierce sense of community spirit, pulling together and supporting groups that improve the lives of local residents. We established the Dalradian Community Fund (formerly known as the Tyrone Fund) in 2015 to formalise something we had been doing for a long time supporting local people. To date we have supported over 600 community groups and provided over £1.1 million in funding. Funding has supported a diverse range of projects in the arts, environment, health, sports and education. We have also provided substantial funding to help health providers during the pandemic. Post planning approval, we are committed to further community investment: a minimum of £4 million in community projects over the lifetime of mine operations.

# People

#### **Community Support Tops £1 Million**

Our support for charities and community organisations in Tyrone and Fermanagh surpassed the landmark £1 million figure in 2021.

The majority of the donations were made through the Dalradian Community Fund, formerly known as the Tyrone Fund, which was established in 2015. The fund provides grants and donations to groups committed to benefiting the local community. To date, the fund has supported more than 600 organisations.

Following dialogue with councilors from Fermanagh and Omagh District Council in 2021, we expanded the fund to include organisations from Fermanagh as well as Tyrone. There was a great response and we awarded grants to sports clubs,

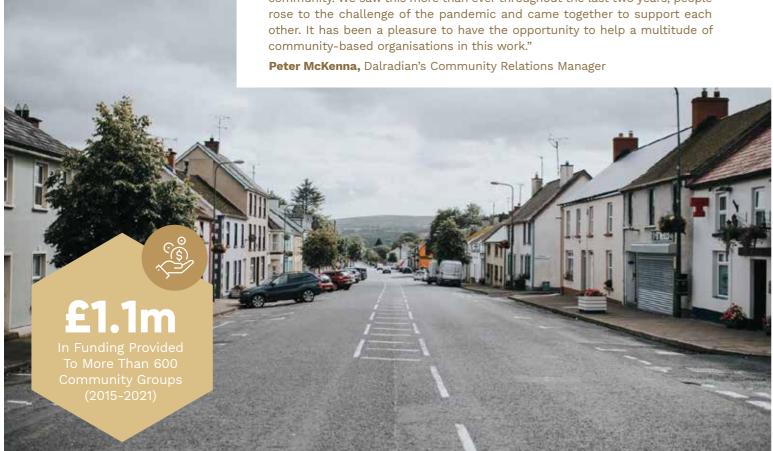
charities, community groups, schools, playgroups, and youth clubs throughout both counties. We are fortunate to have so many community organisations committed to improving the quality of our everyday lives and they should be applauded.

Support was also provided to specifically help with the pandemic. We assisted doctors by providing them with safe transportation to make house calls to patients in the community and also provided PPE to other health care providers.

This is just the beginning. Dalradian will also provide future support through a minimum £4 million community fund once the mine becomes operational. This commitment is an integral part of the project's planning application.



"The response and volume of applications to the Dalradian Community Fund is impressive. There are so many groups providing excellent services to our community. We saw this more than ever throughout the last two years, people



#### Honouring 10 years of service

Seven members of our team celebrated reaching ten years of service in 2021.

They joined Dalradian when it was in its infancy and played pivotal roles in developing the company, their respective departments, and our culture today.

Opportunities to continue their development were supported, with team members undertaking professional qualifications, training courses, secondments and participating in mine exchanges. All seven employees were presented with a gift from the company to mark the occasion and show appreciation for their work and dedication.



#### Road to Investors in People recertification

We received Investors in People (IIP) accreditation in 2019 with reassessment due in 2022.

IIP have been operating since 1991 and are recognised in 66 countries worldwide for providing a global benchmark for people management. They accredit those who invest in their people and assist them in supporting their employees and company culture.

IIP assesses against a specific framework to understand and measure how well we are leading and supporting our people compared to other companies in the mining and quarrying industry. The framework has three pillars, Leading, Supporting and Improving. Within each pillar, there are three competencies which we are measured against. The assessment includes a company-wide survey and interviews with individual team members to get their views. A report is then produced with recommendations to help us improve. There are different levels of accreditation

- platinum, gold, silver, bronze and the standard level. We achieved the standard level in 2019 and were awarded the gold level accreditation in 2022, prior to publication of this report.



# People

#### **Keeping our community informed**

Helping the local community understand our project is important. We use several communication methods to keep everyone informed and updated on our project. These include:

- · Newsletter (electronic and print)
- · Social media (Facebook, Twitter, Instagram, and LinkedIn)
- Advertorials in local newspapers
- Blogs
- Presentations
- Tunnel tours
- Virtual tours
- Website





#### **Dalradian Mine Rescue Activities**

In March 2020, Dalradian, like everyone else, had to deal with the challenges of COVID-19 restrictions and the change to working from home.

Consequently, we had to stand down our Mine Rescue teams and this shared resource with the IMOS Mine Rescue community. In September 2020, after the introduction of new working practices, our Mine Rescue resource was reinstated together with our training regimes and protocols.

Presently we have eleven crew members which are divided up into two teams. MRS Training and Rescue Ltd supply us with our Drager BG4 sets (underground breathing apparatus) and complete Mine Rescue instruction and training four times per year at approximately 12-week intervals.

A search and rescue training exercise is prepared and then staged. This involves inspection and wearing of breathing apparatus, use of mine plan, traversing the mine safely, casualty loading and safe transport.

In addition the training scenarios

- Entrapped procedure and supporting collapsed ground
- · Fire / Explosion and use of communications
- · Working in a smoke environment and administrating oxygen to a

• Dealing with a collapsed team member and carrying out environmental monitoring.

The above training is supported by regular, in-house, training scenarios on first aid issues.

All Dalradian team members have achieved the Mineral Products Qualification Certificate Level 3 Award in First Aid at Work as well as undergoing a course of instruction, practice and competence in Rescue work. Training and the honing of skill levels is an ongoing process and we continue to work on developing our training protocols to maintain our competence level.

Pictured below: Mine rescue crew members.



# **Dalradian** in numbers



100%

Of Solid Waste Recycled Or Reused In 2021



Environmental Non-Compliance In 2021



**30km** 

River Network Subject To Environmental Testing As Part Of Our Baseline Work



**377** 

Internal Environmental Inspections In 2021

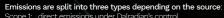


130

**Environmental Monitoring** Points (Water, Air Quality, Radon)



of carbon emissions were offset in 2021 through high-quality international offsetting projects, resulting in carbon neutral certification. In addition, Dalradian supported tree-planting in Northern Ireland to achieve Carbon Neutral Plus status.



Scope 2: indirect emissions from purchased electricity Scope 3: other indirect third-party emissions not controlled by Dalradian



External Agency Environmental Inspections In 2021



90%

Of Our Electricity Was From Renewable Sources



Dedicated Environmental



100+

Meetings With Regulators And Statutory Consultees On Planning Application To Date







Scope 1 (80.7%) Scope 2 (0.7%)

Scope 3 (18.6%)



£1.1m

In Funding Provided To More Than 600 Community Groups, Including Those Needing Covid-19 Support (2015-2021)



1,600+

People To Date Have Taken Tunnel Tours\*



690+

Landowners Have Given Us Permission To Sample Or Access Their Property For Exploration Or **Environmental Monitoring** 



88%

Of Landowners Approached For Permission Agreed To Give Us Access



**35** 

Paid Internships To Date\*



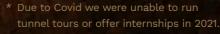
3,500+

People Have Enquired About Jobs At The Mine



14

Contractors Given Inductions In 2021 (253 To Date)





357

days LTI-free at the end of 2021 (LTI is Lost Time Incidents)



Mine Rescue Team Members Trained, With 385 Training Hours In 2021



Health & Wellness Programmes Delivered In 2021 Covering [Alcohol Awareness, Mental Health Awareness, Good Sleep, Heart Health, Developing Personal Resilience, Work Life Balance



0

Health & Safety Non-Compliance In 2021



Staff Employed At The End Of 2021 (Total Of 200+ To Date)



1,200hrs

training hours in 2021 and 16,000 total (2015-2021)

20 Responsible Business Report

### **Environment**

We aim to build and operate one of the world's top modern mines right here in Tyrone. We will use best practices and the latest technology to achieve a highly productive mine while minimising the impact on the environment.

Dalradian's recent exploration operations demonstrate our careful environmental management. For example, we use bog mats on drill rig sites so that it is difficult to even tell where we were working within a few weeks of leaving the site. At our exploration site where we did the test mining, we have restored our waste rock store so well that it blends in with the surrounding fields and has withstood some serious flooding events that caused so much damage to local infrastructure in 2017. As part of our Carbon Neutral Plus programme, we have supported planting of a total of more than 1300 native species trees in Northern Ireland over the past three years. As well as storing carbon, these will support local biodiversity.

Our mine design is at the forefront of modern mines, with a reverse osmosis water treatment plant, a dry stack tailings facility and a commitment to carbon neutrality. The potential ecological impacts of the mine have been rigorously assessed using best practice guidelines and mitigation measures have been adopted to eliminate or reduce any potential impacts upon ecological receptors to negligible levels. Dalradian has committed to ensuring that the proposed mine delivers Biodiversity Net Gain.

#### **Lisheen Experience**

North Tipperary is a rural area that included a zinc mine until its closure in 2015. The mine employed around 400 people for almost 20 years and provided many benefits for the local community in the form of career opportunities, new business for local firms as well as support for community projects. Following the closure and successful rehabilitation of the Lisheen site (believed to be one of the world's finest examples of environmentally sensitive mine closure and rehabilitation), the land has been repurposed to develop Ireland's National Bioeconomy Campus, facilitating sustainable innovation.



Photo Malone O'Regan Environmental

#### **Native Tree Nursery**

In addition to the tree planting we have done for several years in Northern Ireland as part of our Carbon Neutral Plus certification (1300+ trees planted to date), we have made a start on a native tree nursery. In the autumn of 2021, seeds were collected from 7 species native to our project area.

They were placed in small pots and kept overwinter to germinate this spring. Pictured is a small oak tree, the pride and joy of our Sustainability Manager, Oonagh McKenna, who gathered the seeds and has tended them since then. More seeds are being gathered throughout the season in 2022 to learn the best timing for each seed type to be gathered and planted.

A local community organization has granted us space to plant the seedlings as they grow larger. Ultimately, we'd like this test project to grow much bigger, into a local business that can supply trees for rehabilitation of areas around the mine as well as for other interested individuals and businesses in the



## **Environment**

#### **Climate Change**

Dalradian has been active in management of climate change from the standpoint of minimising the impacts of our existing and future operations on climate as well as managing the risks that climate change could bring, both in our existing operations as well as the proposed mine.

As part of our carbon management plan, we reduced emissions during 2021 by 16.6% compared to the previous year.

In our existing operations, the primary focus for climate change management is the exploration site. Within that site, the waste rock store and the water treatment plant were engineered and are maintained with climate change in mind. As a result, the site coped with the local flooding events of 2017 that caused substantial damage to roads, bridges, homes and businesses in the North West (as reported in the DAERA report Draft 3rd cycle River Basin Management Plan: For the North Western, Neagh Bann and North Eastern River Basin Districts (2021 - 2027).

The future mine has been designed using the best available technology to manage climaterelated risks, including:

- Mining is underground.
- The tailings method is dry stack, not a dam, which is important in an area that already receives substantial rainfall (we studied and visited projects in higher rainfall areas that were using the technique to ensure it would work well). Another advantage to dry stack is it can be progressively rehabilitated during operations.
- Ponds are designed to withstand a 1 in 1,000 year storm event and are developed through 100% excavation into existing

• We introduced a belt system as the primary method of transporting ore and waste rock to surface, thereby reducing diesel consumption, and introduced underground ore-sorting equipment at source to improve efficiency. Smaller underground vehicles (such as the drill rigs and jumbos) will be electric powered. For the larger machines, we are looking at developing technology and will incorporate it as it becomes proven.

Where relevant, our Environmental Statement for the mine's planning application has considered climate change, for example, in the surface water and groundwater impact assessments and modelling, which were independently reviewed by a mine waste consultant appointed by the Department for Infrastructure. Development of the site also makes flooding in the catchment less likely, due to on-site storage capacity, while at the same time protecting current low flow minimums by controlling discharge. Water for operations will be sourced onsite, recycled extensively to minimise water use and treated prior to release.



Dalradian has achieved Carbon Neutral Plus status for 2019, 2020 and 2021. We are committed to continue this programme during construction, operations and closure. That will include proactively minimising emissions each year for each specific area of our business. We go above and beyond to reach Carbon Neutral Plus status by planting trees in Northern Ireland each year. We also actively engage with our suppliers to see how their approach to climate can help to minimise climate impacts and to encourage more progress in this area.

In Northern Ireland, peat is an important store of carbon and assists in managing water flow during heavy rainfalls, as well as maintaining good water quality. Northern Ireland has 24.6% peat coverage and 86% of peatlands are in a degraded state due to drainage, overgrazing, afforestation, burning and extraction. (Source: NI Assembly Research Briefing Paper NIAR 117-2021). Peat that is degraded releases its carbon into the atmosphere, accelerating climate change. Thus, peat rehabilitation is a key action to lower emissions and fight climate change.

Peat loss will be minimised in construction of the project and unavoidable peat loss will be offset by peat restoration in the local area. Details on peat management are contained in the 2017 Ecological Mitigation and Management Plan submitted with the planning application. The mine development will have an overall net gain for biodiversity.

Climate change is increasingly being addressed by the management team in budgeting, risk assessments and forward planning. Even though we are pre-operational and have a small staff, we have one manager dedicated to sustainability and a team of staff that meets monthly to move forward sustainability projects. We are continuing to research opportunities for use of renewable energy sources and keeping informed about new technologies to upgrade our fleet.



Photo Sandvik. Examples of electric powered equipment that can be used in the future mine.

## **Environment**

#### Carbon Neutral Plus Certification for 2021

Dalradian achieved carbon neutrality to PAS 2060 (2014) standards for 2021 by developing a carbon management plan and offsetting all carbon emissions by supporting a certified project in Bulgaria.

Our total market-based emissions were 226.6 tCO2e, a 66.8% reduction compared to the baseline year of 2019 and 16.6% less compared to the previous year (2020). Emissions reduced across all categories in 2021.

The main components of our carbon emissions were diesel use (especially at the exploration site for the generator) and travel (including commuting).

The main factor driving the substantial decrease since 2019 was Covid-19 reductions in travel as well as lower activity at site and deferment of exploration drilling. Other factors include changes to operations to reduce emissions such as more efficient lighting, switch to renewable electricity and replacement of one of our diesel-fueled vehicles with an electric car.

The biggest contributor in the year over year reduction was the switchover of all our sites to 100% renewable electricity in February 2021.

The largest opportunity for further improvement in 2022 is improving the

efficiency of our generator use at the

The company's calculation of its carbon footprint for 2021 was independently assessed by Carbon Footprint Ltd, a leading sustainability & climate change solutions provider. Carbon Footprint followed the exacting standards of ISO 14064-1, an international standard for businesses and other organisations to quantify, monitor, report and verify greenhouse gas emissions. By doing this, Dalradian has achieved the status of Carbon Footprint Standard - Assessed for 2021. This process has followed the stringent requirements of BSI PAS 2060, a specification produced and published by the British Standards Institution with the objective of increasing transparency of carbon neutrality claims by providing a common definition and recognised method of achieving carbon neutral status.

The Plus portion of the certification was achieved by supporting tree-planting in Northern Ireland for the third year in a row, benefiting the local region in which we operate.



#### **Off-Setting Project:**

Bulgarian methane reduction / energy production project

### To off-set our emissions in 2021, we have chosen to support a project in Eastern Europe that reduces methane emissions and produces energy.

Methane produced in Kubratovo wastewater treatment plant is captured in common methane tanks and then supplied to the installed Combines Heat and Power (CHP) gas engines for electricity and heat production, which in turn substitutes both the plant's electricity purchases from the grid and fossil fuel usage. Excess electricity is supplied to the grid.

The main purpose of the project is to transform the existing low tech sludge treatment process at Kubratovo that existed before implementation of the project into a modern advanced treatment process matching

the best sludge treatment practice available in Western Europe. This transformation has a major effect on the environment through dramatically reducing the existing methane gas emissions at the plant while also reducing the volume of sludge (to as much as 50%) that needs to be transported, hence reducing GHG emissions from transportation as well (not included in GHG abatement calculations).

The overall objective of the project is to provide an environmentally friendly sludge treatment process reducing methane and carbon dioxide emissions that - without the project - would have continued.



the local landscape.

**Our business** 

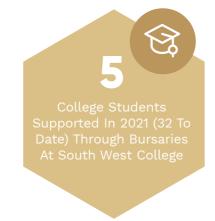
Dalradian has been working in West Tyrone since 2010 and holds exploration licences from the Department for Economy. Our team explores for a range of base and precious metals as well as rare earth elements and other critical minerals.

The company is supported by US investment to advance its project near Greencastle which contains a mineral deposit of gold, silver and copper. We have invested more than £136m to define the deposit, and develop environmental, engineering and economic feasibility studies. Dalradian currently employs 36 people at its Omagh and Gortin offices in Co. Tyrone. In 2017 the company submitted a planning application to develop a long-term, underground mine at Curraghinalt - the planning process is ongoing with the public local inquiry expected to be scheduled soon.

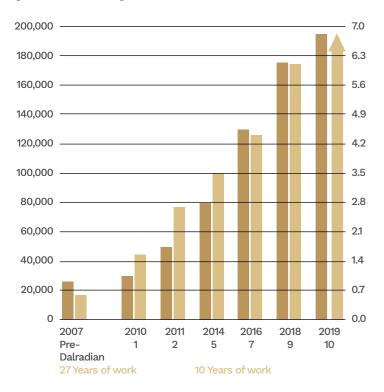
Advancing the proposed mine to operation will create a new industry

for Northern Ireland. This project will be economically transformative for this rural area and, based on the experience from other mines in developed countries, Dalradian is aiming for a 90% local employment rate during operations. Tyrone is already recognised as one of the world's leading regions for the production of mineral extraction equipment (for example, crushers and conveyor belts) and also has strong construction and farming sectors, both of which provide many of the skills needed for miners.

Dalradian has designed a project in keeping with the character of the local landscape and in line with strict regulatory standards. Rehabilitation will commence during operations and the site will be returned for use as farmland / grazing upon closure. Dalradian has achieved the status of Carbon Neutral Plus for 2021, the third year in a row. In 2019 the company committed to building and operating the first carbon neutral mine in Europe.



# Our progress at Curraghinalt (2010–2019)



- More than 190,000 metres of drilling - steady growth in size of the deposit
- 6 resource updates resulting in a 10x increase in resources
- 2,000 metres of underground development with three areas of test mining
- Economics proven through multiple economic feasibility studies
- Permitting application advancing through planning process
- Metres of Drilling (Left side)
- Amount of gold identified (millions of ounces Right side)

#### State-of-the-art features

underground

Precious metals are indispensable for modern life and demand for them has grown with their application in emerging renewable energy technologies to tackle climate change. To extract these metals responsibly we have designed a best practice modern mine.



by Dalradiian

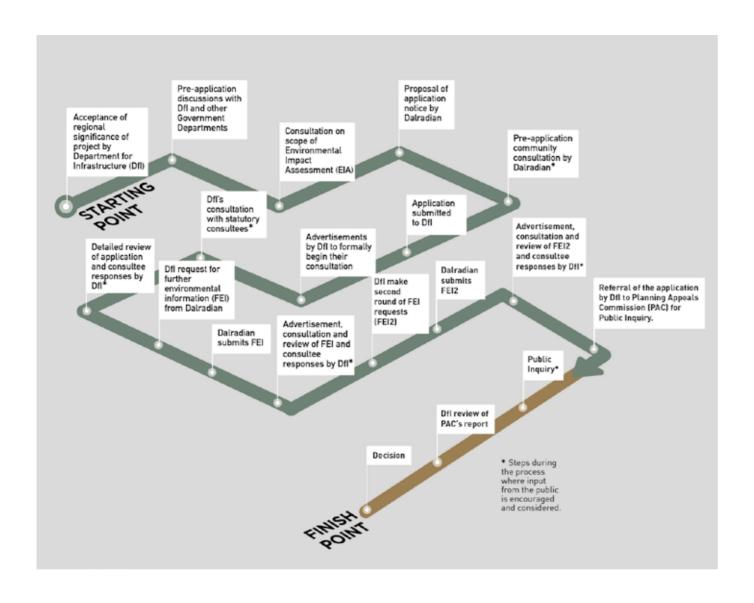


### **Our business**

#### Public Inquiry: nearing the end of an extensive planning process

In 2021 our planning application to build an underground gold-silvercopper mine in Tyrone was referred by the Minister for Infrastructure to the Planning Appeals Commission (PAC) for a public local inquiry. This major step forward was preceded by extensive consultation with stakeholders on the main application and two rounds of further environmental information.

The public inquiry is expected to take place soon and will bring together planning and environmental experts, community and business groups, presided over by PAC commissioners. Dalradian has supported this important step in the process from submission of the application since it provides an opportunity for independent scrutiny in an open and transparent forum. The public inquiry gives all interested parties another chance to have their voices heard. Following the inquiry, the commissioners will write a report summarizing their key findings, with their recommendation about whether the project should be approved by the Minister for Infrastructure. Following review by the Minister, a decision will be made.



#### Key topics covered by the Environmental Impact **Assessment in the planning application**





Landscape and visual
Surface water
Groundwater
Soil and geology
Ecology
Air quality
Noise and vibration
Traffic and transport
Radon
Archaeology and cultural heritage
Economic & social/community
Health (human and animal)



Consents Required for Operations	as of 31 Dec 2021	
	Submitted	Received
Planning Permission	~	<b>✓</b>
Water Discharge Consent	~	<b>✓</b>
Explosives Storage Consent	~	~
Planning Permission	~	
Powerline	~	
Road Abandonment	~	
Abstraction Licences (2)	~	
Water Discharge Consents (2)	~	
Explosives Storage Consent	~	
Schedule 6 (Culverting)	~	

Underground Exploration



# **Sustainable Communities Benefit** from Modern Mining

Although mining is a new industry for Co. Tyrone, modern mines can be found throughout Europe - including close to home in both Ireland and Britain. Mining exists safely alongside communities, and you don't have to look far to find an example. Just 85 miles from Omagh is the Tara Mines which lies on the edge of Navan, the county town of Meath.



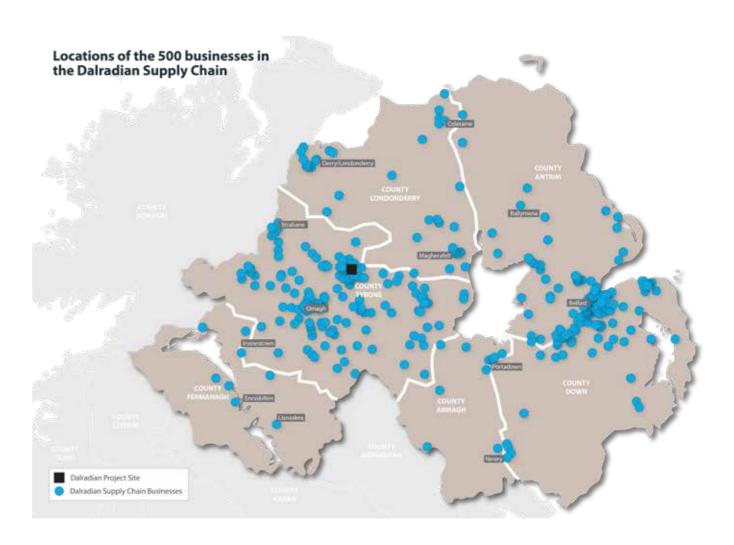
This mine has been operating safely and successfully since the 1970s. It operates less than 100m from its nearest neighbour. It has a workforce of around 1,000 in addition to many more indirect and induced jobs.

The mine, Europe's largest zinc and lead mine, uses processes similar to those proposed by Dalradian.

No two mines are the same, but as Navan's example demonstrates, mining can not only provide direct economic benefits, but it can also co-exist successfully with people and activities such as angling and farming which rely upon a safe environment.

"My working week always involves some interaction with the team at Tara Mines. In my current role it's not hard to see the value of mining to Navan and the wider county. Tara Mines came to Navan in 1977 creating many jobs. The town began to grow to accommodate the new industry. Nearly every member of our hotel staff have a relation or friend who has at one stage worked at the mine. The business we receive from the mine is substantial. In 2017 alone, Tara Mines was responsible for over 1,000 room nights, booked either directly or through their partner businesses."

**Local Hotel Manager** 



### Goverance

A solid framework of systems and policies sets the foundation for operating responsibly.



Dalradian are members of the following associations:





























Each year, management update the company's policies and share them with staff and contractors for their review and consent. The current set of [more than 30] policies provide guidance for our staff and contractors in people management, health and safety, environmental responsibility, communications and ethical business practices. They also describe Dalradian's approach to a family friendly workplace, flexible work, and protection of human rights.

Having these policies and systems in place also allows us to measure and improve our performance. Major policies are listed below:

- Business Conduct & Ethics
- Health & Safety
- Environmental
- Carbon Management
- Anti-Corruption & Bribery
- Whistleblowing
- Equal Opportunities
- Employee Data Privacy
- Business Travel & Expenses
- Bullying and Harassment
- Family Friendly (Maternity, Paternity, Shared Parental Leave, Adoption)
- Drug and Alcohol
- Dignity at Work
- Flexible Working

The Critical Minerals Association (CMA) provide a platform for companies and individuals to come together and share key insights with the UK Government, which now has an All-Party Parliamentary Group on Critical Minerals. The CMA have been one of the most active industry voices over the past several years. Since formation, they have presented papers to UK Parliament covering ESG, mineral licencing and planning/permitting, including recommendations for improving policy such that the UK can source the critical minerals needed to achieve Net Zero and other key government goals.

# **SASB Metals & Mining Standard**

The table below cross-references our results to the **Sustainability Accounting Standards Board (SASB)** framework. The SASB Metals & Mining Standards identify the environmental, social and governance (ESG) issues most relevant to our industry.

Topic/Code	Requirements	2020	2021	Notes	
Greenhouse Gas	Greenhouse Gas Emissions				
EM-MM-110a.1	Gross global Scope 1 emissions, Scope 2 emissions, Scope 3 emissions; percentage covered under emissions-limiting regulations	195.9 tonnes 16.6 tonnes 78.3 tonnes*	182.8 tonnes 1.7 tonnes 42.1 tonnes 0%	p. 18  2020 numbers have been restated  – overall lower by 58.2 - due to errors in the original calculation	
EM-MM-110a.1	Discussion of long-term and short- term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Partially reported	Partially reported on p. 24		
Air Quality					
EM-MM-120a.1	Air emissions of the following pollutants: (1) CO, (2) NOx (excluding N2O), (3) SOx, (4) particulate matter (PM10), (5) mercury (Hg), (6) lead (Pb), and (7) volatile organic compounds (VOCs)			Not reported	
Energy Managem	ent				
EM-MM-130a.1	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	1,063,110 kWh 100 c.30%	830,107 kWh 100 c.90%	The figures include all scope 1 and 2, and employee-owned vehicle travel.	
				Feb 2021, switched to 100% renewable power. Figure cited in 2020 report only included electricity.	
Water Manageme	ent				
EM-MM-140a.1	(1) Total fresh water withdrawn, (2) total fresh water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	0 cubic metres 0 cubic metres	0 cubic metres 0 cubic metres		
EM-MM-140a.2	Number of incidents of non- compliance associated with water quality permits, standards, and regulations	0	0		
Waste & Hazardo	us Materials Management				
EM-MM-150a.1	Total weight of tailings waste, percentage recycled	0 tonnes not applicable	0 tonnes not applicable		
EM-MM-150a.2	Total weight of mineral processing waste, percentage recycled	159 tonnes 0%	0 tonnes n/a	2020 amount was settled sediment from the Water Treatment Plant; only occurs every few years during this pre-development phase	
EM-MM-150a.3	Number of tailings impoundments, broken down by MSHA hazard potential	0	0	uns pre-uevelopment phase	
Biodiversity Impa	Biodiversity Impacts				
EM-MM-160a.1	Description of environmental management policies and practices for active sites		p. 20-25	Ecological Impact Assessment included in planning application includes the mitigation actions required for the construction and operations phases	

Topic/Code	Requirements	2020	2021	Notes
Biodiversity Imp				
EM-MM-160a.2	Percentage of mine sites where acid rock drainage is: (1) predicted to occur, (2) actively mitigated, and (3) under treatment or remediation	0% for all three	0% for all three	
EM-MM-160a.3	Percentage of (1) proved and (2) probable reserves in or near sites with protected conservation status or endangered species habitat	100% for both	100% for both	
Security, Human	Rights & Rights of Indigenous Peoples			
EM-MM-210a.1	Percentage of (1) proved and (2) probable reserves in or near areas of conflict	0% for both	0% for both	
EM-MM-210a.2	Percentage of (1) proved and (2) probable reserves in or near indigenous land	0% for both	0% for both	
EM-MM-150a.3	Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights, and operation in areas of conflict		Engagement processes on p. 9, 10, 13, 14, 16, 19, 28; policies on p.33	Not applicable (indigenous rights and areas of conflict)
Community Rela	ations			
EM-MM-210b.1	Discussion of process to manage risks and opportunities associated with community rights and interests		p. 9, 13, 14, 16, 19	
EM-MM-210b.2	Number and duration of non- technical delays	0 days	0 days	
Labour Relation	s			
EM-MM-310a.1	Percentage of active workforce covered under collective bargaining agreements, broken down by U.S. and foreign employees	0%	0%	
EM-MM-310a.2	Number and duration of strikes and lockouts	0 days	0 days	
Workplace Healt	th & Safety			
EM-MM-320a.1	(1) MSHA all-incidence rate, (2) fatality rate, (3) near miss frequency rate (NMFR) and (4) average hours of health, safety, and emergency response training for (a) full-time employees and (b) contract employees	0 0 2.32 25 hours 0 hours	0 0 0 12 hours 0 hours	
<b>Business Ethics</b>	& Transparency			
EM-MM-510a.1	Description of the management system for prevention of corruption and bribery throughout the value chain			Have an anti bribery and corruption policy that is compliant with UK Bribery Act
EM-MM-510a.2	Production in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	0 tonnes	0 tonnes	
Production				
(1) Metal (2) Finished metal products		0 tonnes 0 tonnes	0 tonnes 0 tonnes	
Workers				
Employees		38	37	
Contractors (percentage)		15.6%	14%	

### DALRADIAN



