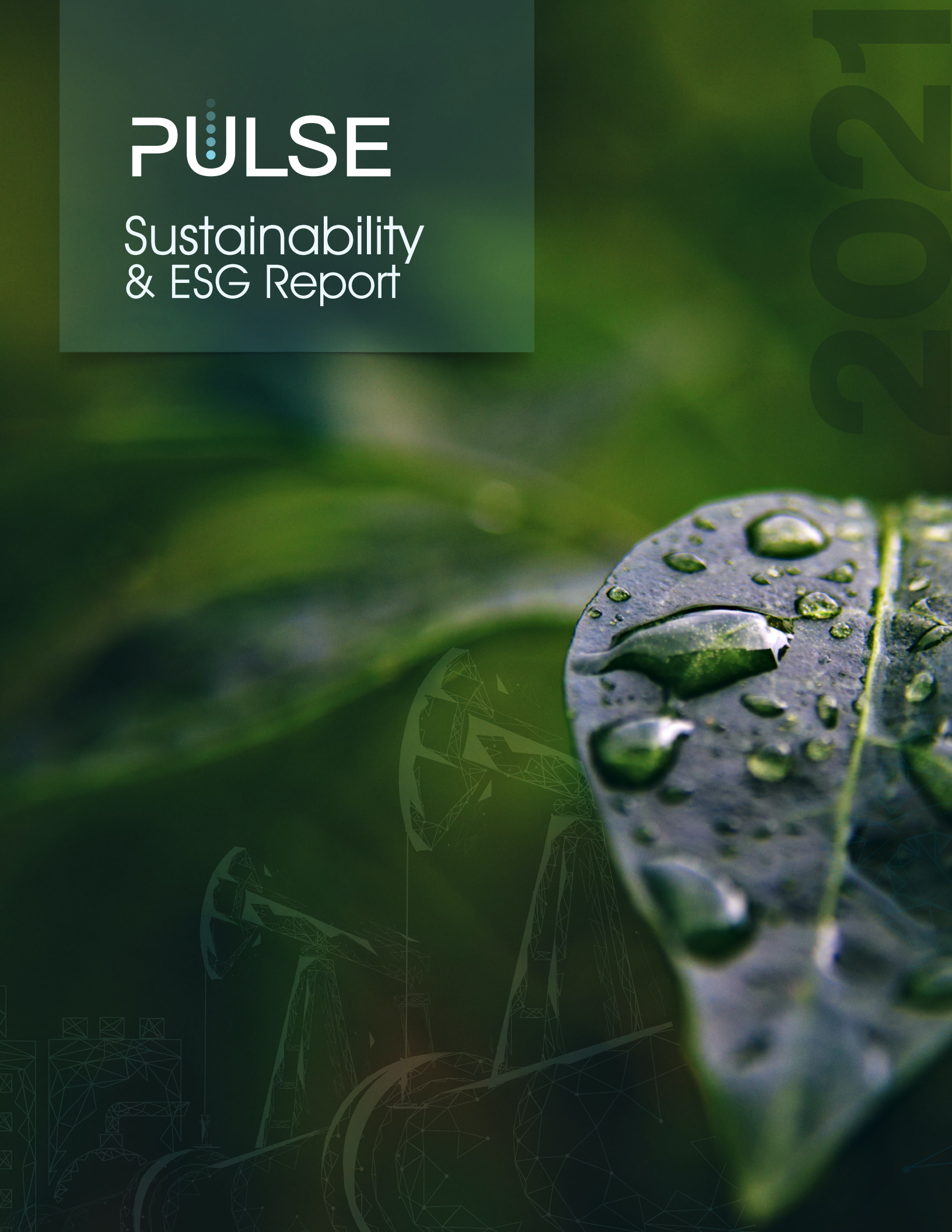
PULSE

Sustainability & ESG Report

2021



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Message from the President & CEO

Supporting the Energy Sector – Longstanding and Emerging

As the market leader in the acquisition, marketing and licensing of two-dimensional (2D) and three-dimensional (3D) seismic data for the energy sector in Western Canada we're excited to see how our company is evolving with the sector. Seismic data was predominately used for oil and natural gas exploration and development and now we're building a growing client base in the exploration for non-traditional forms of energy and related resources, for example geothermal, lithium, carbon capture utilization and sequestration and helium extraction. Pulse owns the largest licensable seismic data library in Canada, currently consisting of approximately 65,310 net square kilometres of 3D seismic and 829,207 net kilometres of 2D seismic, extensively covering the Western Canada Sedimentary Basin (WCSB). We will continue to support the oil and gas industry, while **we explore new industries and innovations to build our business, with a focus on those in the energy transition as we believe our data is a critical resource to ensure the smallest impact with the greatest outcomes for our future**. As we support this growing industry and commitment to sustainable energy transitions, we want to show our commitment to sustainability with this inaugural ESG report.

Commitment to a new Seismic Industry & the Environment

Since our company began more than two decades ago, we have seen our industry evolve. While we have not collected seismic data through field acquisition since 2015, since 2005, Pulse's seismic survey operations have utilized low-impact seismic (LIS) techniques including small, low-impact equipment, much narrower seismic lines, 'avoidance' cutting and careful remediation of all physical impacts. Our approach significantly reduced the environmental footprint of collecting seismic data – but we want to do even more. Going forward, **we are committed to best practices with any future seismic data collection, as well as contributing to the restoration of our environment**. Furthermore, we will continue to partner with industry, government, academia and the non-profit sector to ensure our path forward is a sustainable future for all.

Strong Team, Strong Communities

Our people are at the core of our success, and our team has shown leadership and commitment to supporting our clients, industries, and partnerships through strong corporate citizenship, supporting causes in the communities where we live and work. We in turn want to ensure that **our company is a great place to work – leading with integrity in everything we do**. Our team is small but mighty, and we're all in this together as we grow our client base, engaging in the energy transition, and continuing to pursue growth opportunities that meet our financial and technical criteria while maintaining a low-cost structure. This ESG report is a reflection of all our team's dedication and hard work for our company, the industry, the environment and our communities.

Neal Coleman
President & Chief Executive Officer

Our Sustainability Commitment

ESG performance is becoming increasingly important and a standardized requirement across many industries. This includes sectors we have worked with for decades, such as the oil & gas sector, as well as sectors we have begun to work with more recently, who are a part of the energy transition and new resource economy (lithium, helium, etc.). **We want to show our work and commitment to building a sustainable future for our industry and to all those with whom we work**.

With this inaugural report, Pulse Seismic has an opportunity to take an active approach to managing risk, due diligence, demonstrating transparency, and establishing initial benchmarks that provide baseline data and standards to improve organizational performance. **Sustainability is embedded throughout our corporate strategy, recognizing the link between environmental, social and governance (ESG) initiatives and value creation are aligned with our goals and priorities**. This initial report is the first step in what is anticipated to be a multi-year undertaking to demonstrate this commitment to our shareholders, investors, customers, staff, and communities where we work and live.

In selecting material ESG topics and metrics for this report, we have referenced key ESG reporting frameworks, including the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB). With no reporting and disclosure metrics specific for our industry, we cross-referenced the material topics and metrics from their standardized frameworks, as well as the Professional & Commercial Services, and Software & IT Services metrics. Furthermore, we wanted to demonstrate our commitment and alignment with the United Nations Sustainable Development Goals (SDGs) (see the SDG icons used throughout this report), and the Truth and Reconciliation Commission (TRC) of Canada Calls to Action, to ensure **a holistic approach and reporting practice going forward**. We're excited to share our first ESG Report and to continue to build on the momentum from this process.

Pamela Wicks
VP Finance & Chief Financial Officer

ESG Highlights

Eliminated ~ 550,000 linear kms of environmental disturbance that would have resulted if the 2D and 3D data licenced in last five years had been newly surveyed for each client [1]

$11.6 million worth of Data donated to Academic Institutions for Research & Learning

↑Increase in 2D km's of data licenced and sold to **new energy transition industry clients from 37% of total 2D sold in 2020 to 64% in 2021**

Physical storage reduction – smaller footprint (sq²) + Smaller office and server room footprint (reduced scope 2 emissions)

6000 cubic feet of recycling equated to ~90,000 lbs of recycled material [2]

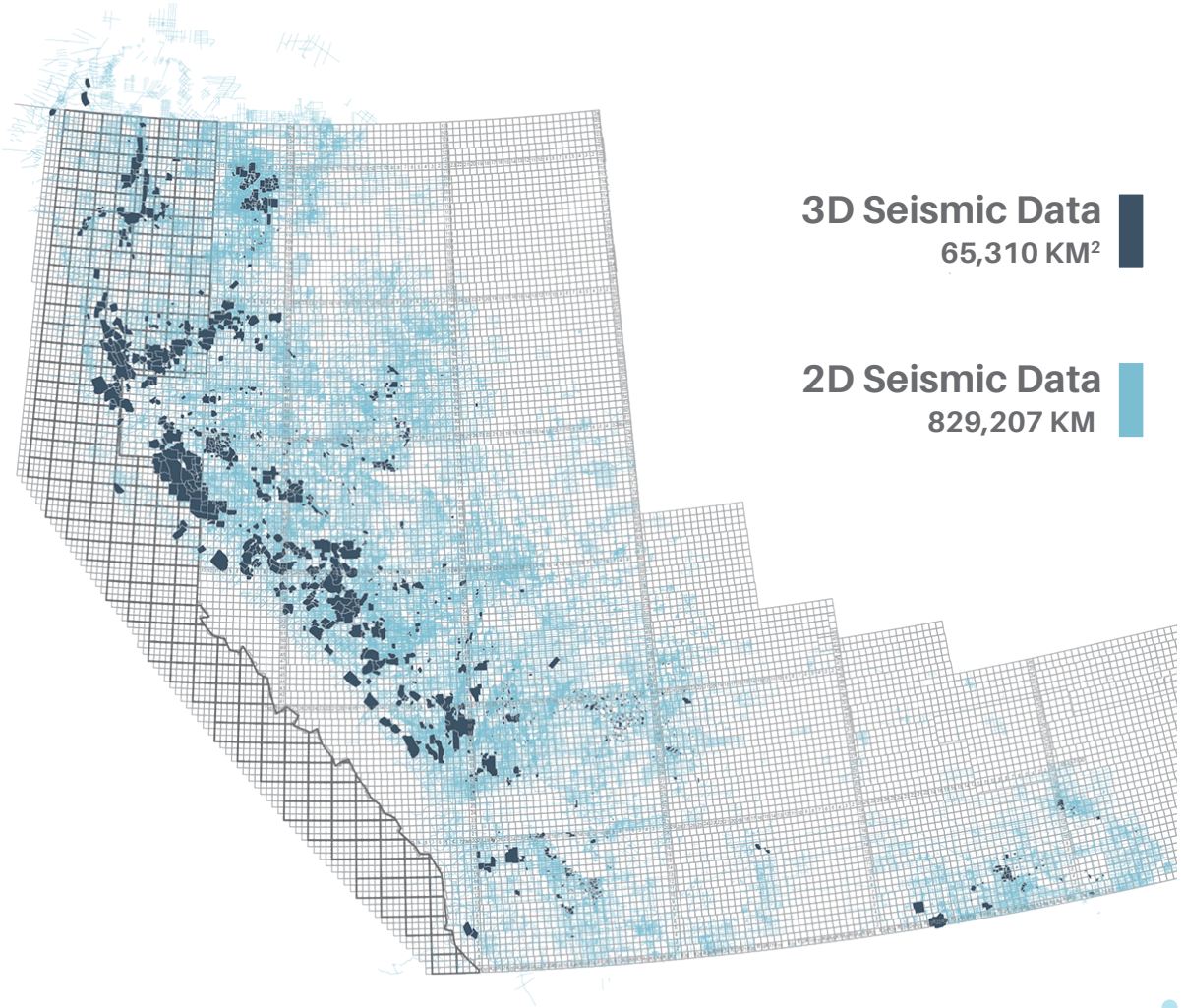
[1] A 3D seismic survey has source and receiver lines laid out in a grid formation. The total length of these lines, which cause an impact on the environment, is approximately 16 linear kilometres, per square kilometre, on an average 3D seismic survey.

[2] Between October 2020 and October 2021

Our Business Advantage

We are an industry leader with the largest licensable seismic data library in Canada, encompassing approximately 65,310 net square kilometres of 3D seismic and 829,207 net kilometres of 2D seismic. Our data library more than doubled in size with the acquisition of Seitel Canada Ltd. (Seitel) in 2019. The library extensively covers the Western Canada Sedimentary Basin (WCSB), where most of Canada's oil and natural gas exploration and development occur. Looking forward, **we're excited for the business opportunities to licence our data to companies in the energy transition** such as geothermal, lithium, carbon capture utilization and sequestration, and related resources such as helium extraction. We want to be a key player in this exciting and innovative economy going forward.

Our business model is designed to generate a growing stream of cash flow by repeatedly licensing the data in our seismic data library. The consolidation of Seitel's data sets with Pulse's has allowed us to increase accessibility to high-quality sub-surface imaging for our clients. This **supports our clients' goals of minimizing their environmental impacts,** as this accessibility limits their need to acquire original data through field operations, which in turn reduces the overall need for additional disruption to the environment from new field acquisition, reducing impacts to habitats and ecosystems.



Once an industry with a large environmental bearing, today's seismic operations utilize small, low-impact equipment, which has significantly reduced the environmental footprint. Utilizing mulchers with under canopy GPS allows the equipment to maneuver on the ground, avoiding taking down the trees, especially the large coniferous. Previously a Cat would take down all the trees in its path and lines would be constructed primarily in long straight lines. The newer technology mulches the trees (leaving the roots and not tearing up the soil), greatly reducing the environmental impact. Should Pulse collect more seismic data in the future, we are committed to doing so in the least impactful and disruptive approach, applying the best technology and innovation, while ensuring to maintain our high standard of data integrity.

15 LIFE ON LAND

Above – mulched seismic line;
Right – reclaimed seismic mulched line after 2 growing seasons.

Pulse is also working with partners to explore the use of sophisticated processing technologies that provide advanced interpretation and visualization of seismic data to reduce the geological and drilling risks in exploring for subsurface targets.

Material Topics

As we release our inaugural ESG report, and commit to annual reporting going forward, it is vital that we anticipate future material issues to ensure our viability and credibility with current and potential shareholders; as well as to ensure the growth and resilience of our company amidst any potential emerging issues within our industry, and in the industries we support.

An internal Materiality Assessment was carried out with the executive and management team, using GRI and SASB recognized material topics, to identify those topics of highest priority for Pulse Seismic now, and going forward. This mapping exercise allows us to better understand the ESG opportunities and potential risks for our company, our shareholders, stakeholders, partners, and communities where we work and live[2].

We are committed to consistent, transparent, and meaningful engagement with our stakeholders and understand that it is essential to know what is important to them, and the significance of our impacts. Furthermore, identifying material issues that may pose a risk to our company, the environment, or to people, allows us to develop strategies and mitigation plans, evolving those risks into opportunities, ensuring our long-term growth, sustainability, and resilience. For our first ESG report we have identified several topics that will drive our sustainability reporting and planning going forward and are addressed in the Governance, Environment and Social sections of this report.

[2] When assessing our material topics we identified our primary stakeholders to include our shareholders, employees (current and future), clients (current and potential), suppliers, analysts and auditors.

Governance

Corporate Governance

The Board of Directors is responsible for stewarding Pulse's overall business and financial strength and provides the necessary risk and hedging management and strategic direction. The Board also participates in corporate governance to ensure that appropriate controls exist in support of ethical business conduct. The Board supports the development of Pulse's ESG commitments and priorities and is ultimately responsible for examining key issues, identifying risks and opportunities, monitoring performance, and ensuring regulatory compliance, with the Environment Health and Safety Committee leading the initiatives, data collection, and reporting to the board quarterly.

Business Ethics & Professional Integrity

Identified as a high priority in our materiality assessment, Pulse is committed to ethical and legal standards in all its business practices and relationships with a Business Principles and Code of Ethics to guide employees[3]. Pulse recognizes that its reputation depends on the integrity and sense of responsibility of our employees, and that they in turn, are all responsible for upholding and managing the company's standards. Pulse is committed to their employees' human rights, safety, health, and wellbeing and have policies in place to ensure these commitments are upheld.

- Board and Management Diversity Policy
- Workplace Harassment Policy
- Maternity and Parental Leave Policy
- Safe Workplace Policy
- Whistle Blowing Policy
- Personal Information Protection Policy
- Workers Rights Policy
- Alcohol and Drug Policy
- Medical Cannabis Policy

Economic Performance

Our primary clients in the oil & gas sector, are facing new challenges and demands from investors, financial institutions and governments for action on decarbonization and net zero commitments. With these challenges there looms an unknown long-term economic stability for the industry. We must ensure our ongoing economic viability and performance for our shareholders and employees, navigating the financial implications and other risks and opportunities.

[3] This includes Employees, Officers and Directors.

Data Security

In our increasingly digital world, there has been an increase in data breaches, accessed confidential customer data, and cyber-attacks with ransom demands. Our business is founded on data acquisitions and sales; thus it is critical that we not only ensure our data security for investor confidence, but for our business integrity. This has always been a priority for Pulse, putting all key protections and processes in place, and going forward we must stay ahead of any new digital security threats and cyber-attacks.

To mitigate these risks, Pulse has implemented measures, processes, policies, controls and monitoring systems that protect our physical and digital assets, as well as our employees. Pulse also uses cyber threat intelligence, testing, intrusion prevention/detection and incident response capabilities to help identify possible cyber threats and adjust our security measures accordingly. We also have a recovery plan in case of a cyber-attack. Pulse uses a third party to store its physical seismic data, our revenue-generating asset, and a backup copy of the digital seismic data library. As part of the risk management strategy, Pulse's IT Director reports to the Audit and Risk Committee of the Board of Directors on a quarterly basis.

To date, Pulse has not experienced a security incident or breach. If a material security breach should happen in the future, the management team's Disclosure Committee would activate the communications plan to inform the relevant stakeholders including employees, directors, customers, securities commissions, stock exchanges, government agencies, and shareholders.

Legal and Regulatory Management

Seismic data is the most valuable asset for the company and it is of utmost importance that Pulse protect it. We have robust legal contracts (licence agreements) in place to ensure buyers understand that ownership of the data remains with Pulse at all times, while clients purchase a licence, or partnership organizations obtain the right, to use the data for its intended purpose.

CLIMATE ACTION

Environment

At Pulse, we recognize that our business activities can have an impact on Climate Change. We want to do our part to respond to the resulting challenges. Pulse is committed to continuous improvement of our environmental footprint and our impacts with respect to data acquisition, energy use, emissions, and waste management.

Pulse has not pursued new field data acquisition in more than 7 years. Instead, we have grown our seismic data inventory through the purchase of existing data sets. This has allowed us to increase our data offerings, with minimal environmental impacts. Going forward, if and when we collect more field data, we intend to follow industry best practices to ensure that we minimize the environmental impact of our operations.

The expansion of our inventory has resulted in increased volume of data storage. We recognize the environmental impacts of data storage centres, which account for 2% of GHG emissions globally, and consume an estimated 3% of the global energy supply. In response, we have recently changed our data servers to improve efficiency and lower energy consumption. This has also allowed us to reduce the size of our physical footprint for storage and cooling. We will continue to evaluate opportunities to reduce the energy needs of our data storage.

Our Footprint

As a professional services company, the impact associated with our operations is largely associated with our office space, data management, and supply chain. As such, Pulse is very conscious of the decisions made with regards to our energy use and identifying paths to reducing our footprint wherever possible.

In 2017, we downsized our office space from over 12,000 ft^2 to 9,500 ft^2. With the purchase of our afore mentioned data acquisition in 2019, our total leased space increased significantly as we also acquired the company's office and warehouse leases[4]. Both former leases are due to expire in 2022.

At the time of purchase, the warehouse contained vast amounts of paper files and reels – how seismic data was stored historically. Since then, the majority of the contents of the warehouse have been gradually digitalized for two main reasons. First, to modernize the data and make it more accessible to clients, and second to decrease the footprint of the data and thereby eliminating the need for the large warehouse. The small portion that remains by the end of the warehouse lease in April 2022 will be moved to an external storage provider.

Concurrently, Pulse has been modernizing its digital data storage by transitioning to newer, more energy-efficient technologies and equipment. In addition, the disaster recovery for Pulse's digital data has been moved from local server rooms to cloud services. Both these initiatives reduced the number of racks required to store the data, reducing the size of our office server room and its cooling needs significantly. Pulse's data storage requirement in 2018 was ~46TB (terabytes). With the acquisition in 2019 this grew by ~120TB. In 2021, total data storage used by Pulse was ~170TB.

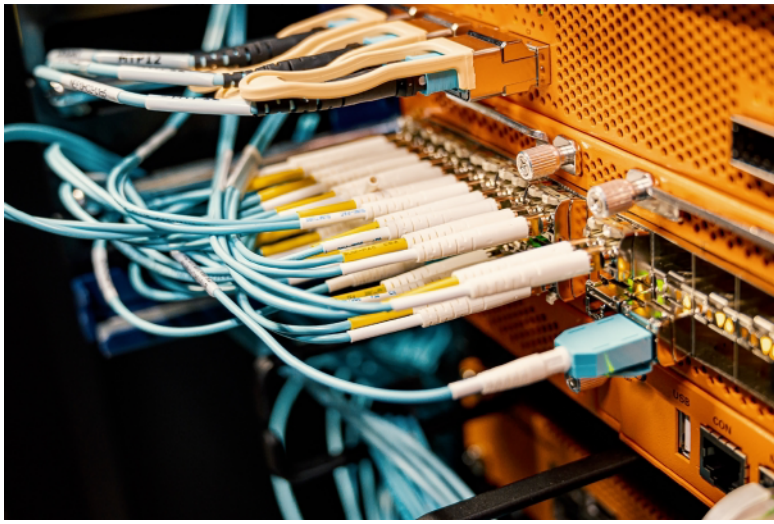
[4] The former Seitel office space is currently sub-leased until the lease expires before the end of 2022.

Energy

Pulse purchases electricity and natural gas to operate, heat and cool its three leased locations. As Pulse is not renewing the leases on the warehouse and the secondary office, total energy use is expected to drop significantly in the next two years, returning close to pre-acquisition levels by 2023[5].

The amount of data storage is an important metric at Pulse that is well suited for comparing the company's energy use. We therefore define Pulse's energy intensity as giga joules (GJ) used per tera byte (TB) of data stored by the company.

The consolidation of the two data sets combined with the reduction of leased space will result in a substantially reduced energy intensity for the company by 2023, as shown in Figure 2.



	2018	2019	2020	2021	2022 (projected)	2023 (projected)
Pulse Office	503	631	710	713	713	713
Warehouse	-	1,637	2,815	3,037	1,012	-
Secondary Office	-	1,867	1,682	1,605	1,471	-
Total	**503**	**4,135**	**5,207**	**5,355**	**3,196**	**713**

Table 1 Total energy consumption from purchased electricity and natural gas to operate the three leased locations per year in giga joule (GJ).

[5] Assuming 2021 usage levels persist into 2022 and 2023, and prorating usage for the expiring locations for 2022.

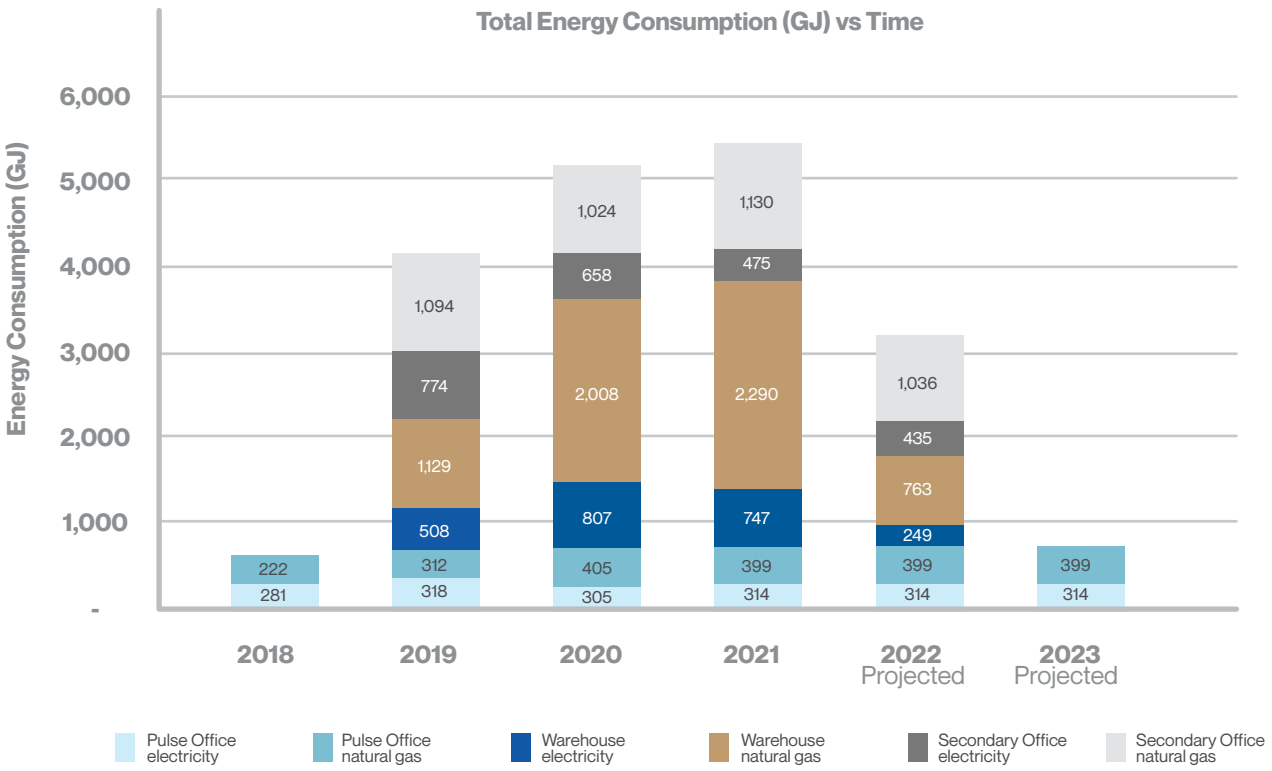


Figure 1: Total energy consumption in giga joule (GJ) by location and energy type per year

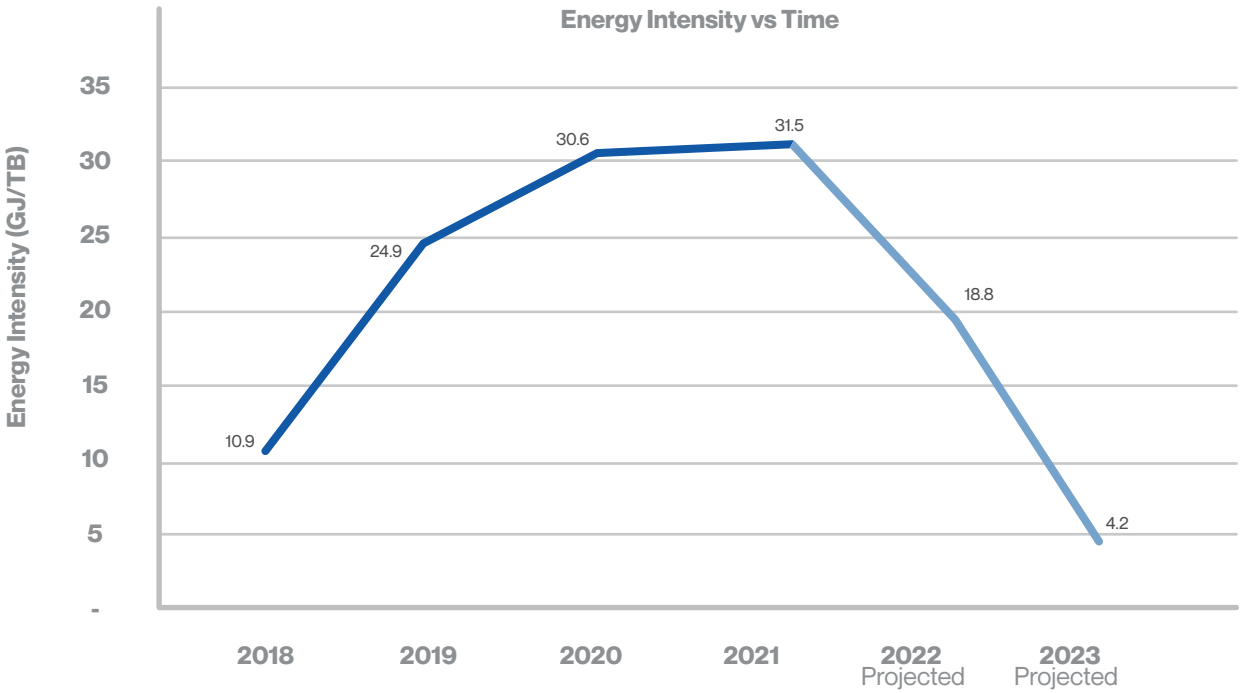


Figure 2 Energy Intensity (Total energy consumption from purchased electricity and natural gas divided by size of digital data set)

Emissions

Scope 1 emissions are deemed negligible to Pulse's operations, as we do not own any buildings or vehicles, nor do we produce a physical product for sale.

Pulse's scope 2 emissions stem from the electricity and natural gas purchased for the currently 3 locations, presented in the Energy Use section above (table 1), as Pulse has operational leases with the respective buildings. Table 2 displays our electricity use and natural gas purchased for heating and cooling converted to tonnes of CO_2 equivalent (tCO_2e). Since Pulse is not intending to renew the leases on the warehouse and the secondary office, scope 2 emissions are projected to decrease significantly over the next two years.

The amount of data storage is an important metric at Pulse that is well suited for comparing the company's emissions. Therefore, Pulse's emissions intensity can be defined as tonnes of CO_2 equivalent generated per terabyte of data stored by the company. As shown in Figure 4, Pulse's scope 1 and 2 emissions intensity is projected to drop below pre-acquisition levels by 2023, attesting to the efforts made to incorporate the acquired data into modern data infrastructure.

SCOPE 1

Direct emissions from operations

SCOPE 2

Indirect emissions from purchased energy

	2018	2019	2020	2021	2022 (projected)	2023 (projected)
Pulse Office	56.0	66.5	69.2	70.4	70.4	70.4
Warehouse	n/a	138.8	231.6	236.6	78.5	0
Secondary Office	n/a	179.1	157.2	133.6	122.5	0
Total	**56.0**	**384.4**	**458.0**	**440.6**	**271.4**	**70.4**

Table 2 Scope 1 & 2 Emissions in tonnes of CO_2 equivalent (tCO_2e) by location per year

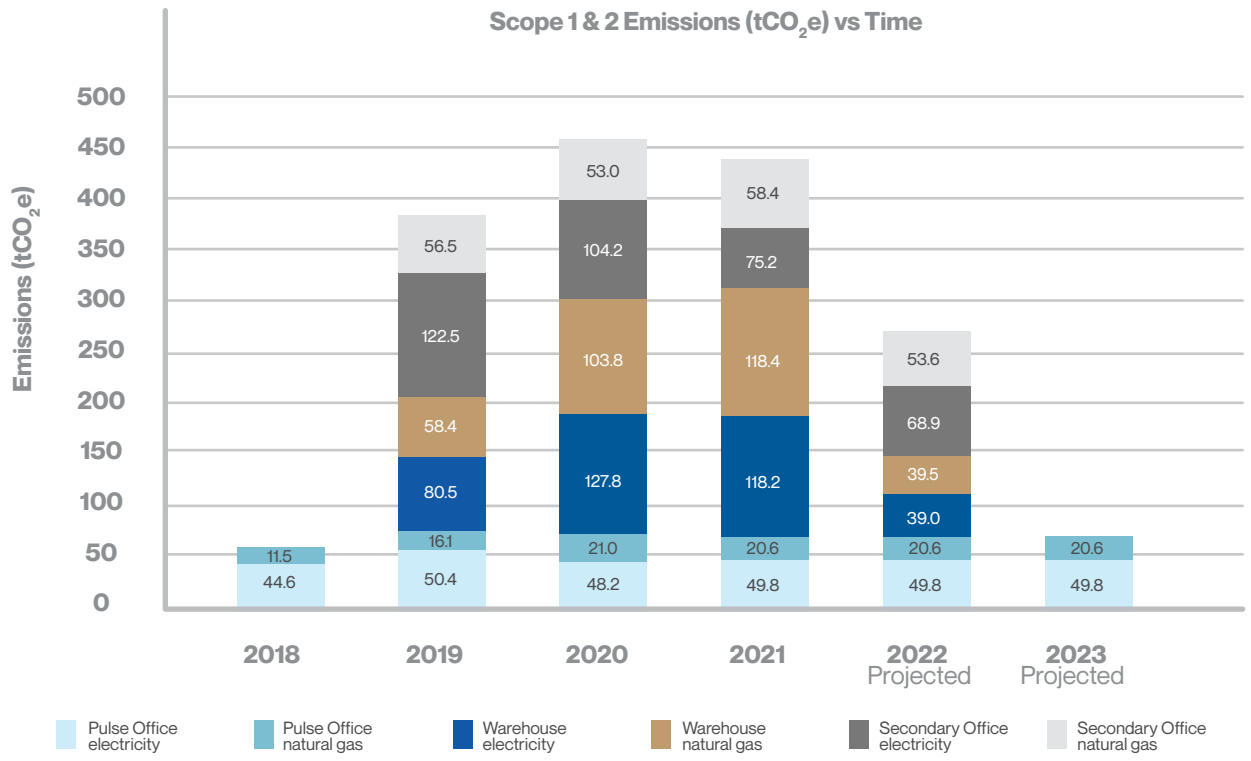


Figure 3: Scope 1 & 2 Emissions by location and energy type by year

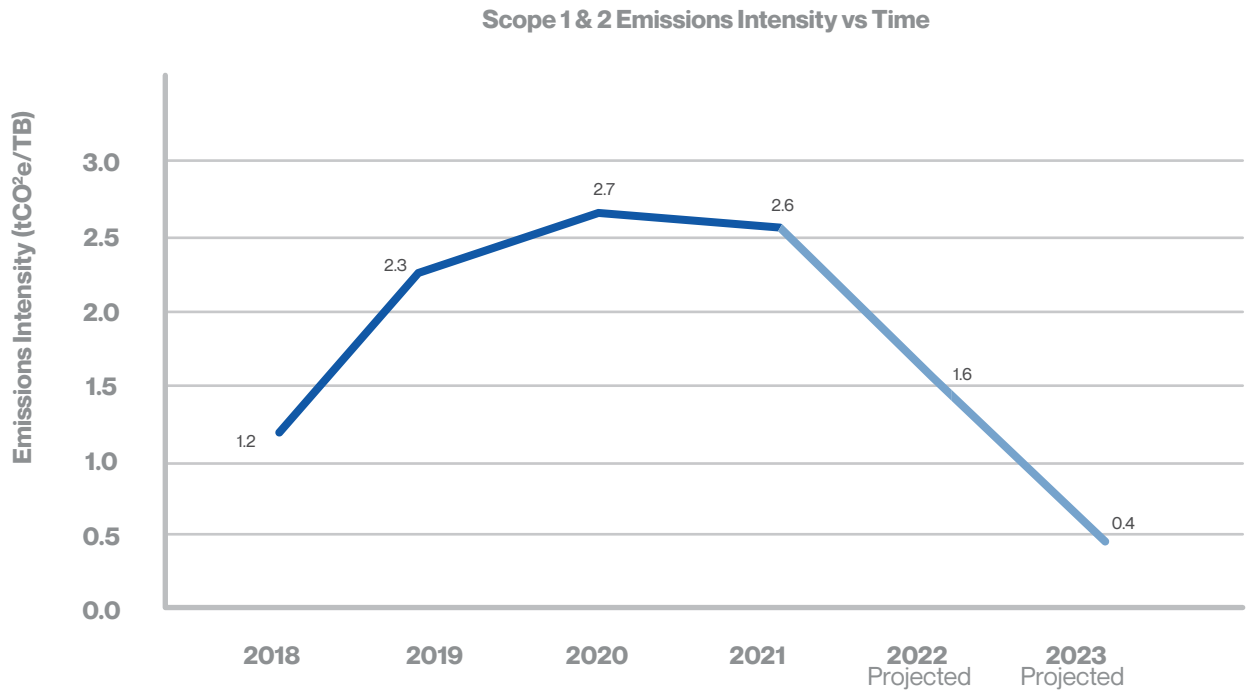


Figure 4: Emissions Intensity (Total scope 1 and 2 emissions divided by size of digital data set)

Waste

Pulse is committed to continually improving and reducing our impact on the environment by ensuring our employees and contractors conduct their business in a manner that will prevent the pollution, destruction, alteration, or contamination of their work environment. We strongly encourage recycling practice at our office and warehouse by using recycling bins for paper and cardboard, glass, plastic, batteries, and printer toner cartridges. We also enforce our e-waste reuse & recycling procedure to keep hazardous materials such as lead, mercury, or cadmium out of the landfills when older equipment is no longer needed. If in operating condition, older equipment is offered to our staff or donated to charity. Any non-operational or unwanted equipment is brought to a recycling facility.

Since the acquisition of Seitel and their data warehouse, we have processed a vast amount of paper and reels to digital format. Over the last 2 years, more than 100 bins have been disposed of. Just about half of these were directed to recycling. Unfortunately, the reels are not recyclable, making up the majority of waste directed to the landfill.

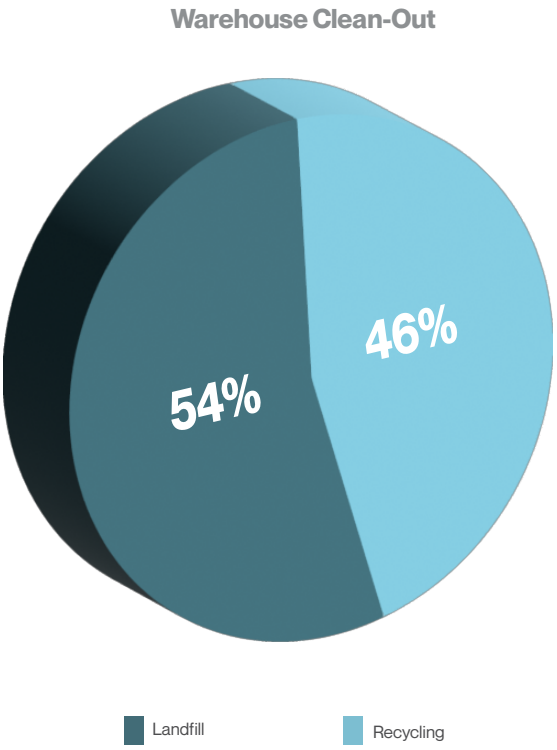


Figure 5: In 2020 and 2021, by volume 46% of waste from warehouse was directed to recycling, 54% to landfill

Social

Employee Engagement

Our people are the strength of our company, their skill set, passion and integrity are what ensure our long-term viability and success. We have a small team of 16 employees and recognize the need to not only retain our current talent, but ensure we are prepared for any turnover in the future and are able to recruit this caliber of employee. We strive to provide our employees an engaging and supportive work environment, and to continue to support their learnings and passions for the industry. As we grow our business in the energy transition markets we will support our staff with training to ensure they are engaged and leading the industry with this knowledge and expertise, building their capacity and ours.

Until 2020 Pulse carried a Certificate of Recognition (COR certification) from Energy Safety Canada for many years. Pulse proudly received exceptional audit results of its safety program, to maintain this certification. In the absence of field acquisition since 2015, the Company chose not to renew the COR certification in 2021.

Workplace Safety

Safety has always been a priority for our employees, and even though we have not been in the field in 7 years to collect seismic data we ensure that our office and warehouse operations are safe and our employees are prepared and trained for any possible risks. We are proud to report that between 2017 and 2021 our employees received 553 hours of training, in all aspects of safety and wellbeing in the workplace. Our Environment, Health & Safety (HSE) Committee has been diligent in ensuring the health, safety and wellbeing of our team. In the last five years Pulse has completed:

- 20 JHSC (Joint Health and Safety Committee meetings)
- 30+ Staff safety meetings (formal and informal)
- Completed 30 corporate site office safety inspections
- Created 8 company specific custom training courses
- Provided 15 safety bulletins to all staff members
- Completed 66 safety orientations for visitors and new staff members

Collaborations & Partnerships

Pulse is committed to collaborations and partnerships with non-profit organizations and academic institutions in the pursuit of research and innovation for the seismic data industry, the energy transition, the protection and restoration of habitats, and the betterment of community health and wellbeing.

In 2021 Pulse began a collaboration with ABMI (Alberta Biodiversity Monitoring Institute), supplying the geo-referenced 2D and 3D seismic shapefiles and attribute information to support their Alberta Human Footprint Monitoring Program (AHFMP). The goal of the AHFMP is to improve the accuracy of human footprint data in Alberta and to focus expertise from the various organizations on a single, value-neutral, scientifically-defensible footprint dataset. This work provides a historical overview of key events related to the development of geophysical exploration in Alberta and is intended for researchers and planners using the ABMI Human Footprint Inventory (HFI), a publicly available data set.

Pulse supports, and partners with, academic institutions by providing their data sets for research and teaching, as well as employees giving their time to speak with students, offer guest lectures, workshops, and support research projects. In the last five years, we have provided $11.6 million in data to Alberta institutions including the University of Calgary (UofC), SAIT (Southern Alberta Institute of Technology), the University of Alberta (UofA), as well as the Alberta Energy Regulator (AER) for research, and the University of Western Ontario (Western).

9 INDUSTRY INNOVATION AND INFRASTRUCTURE

Community Investment

Our team is small but mighty, and this goes beyond our work, its in our communities. Pulse encourages employees to volunteer their time, to support the causes and initiatives of greatest value and importance to them, and we support their donations through a matching/sponsorship program. We support many initiatives and organizations, however, our investment priorities have predominately been focused on women and children, both financially and with our volunteer hours, these include:

- Canadian Women's Foundation which is focused on critical challenges facing diverse women, girls, and Two Spirit, trans, and non-binary people all over Canada for effective long-term change for gender equality and justice.
- Alberta Children's Hospital Foundation which provides world class health care for children ranging from broken bones to cancer, and many other conditions and treatments, and provides support for their families as well.
- Ronald McDonald House Charities alleviate the tremendous emotional, financial and physical burden faced by families during difficult times of their child's serious illness or injury.

With the Covid-19 Pandemic we were not able to provide as many volunteer hours as we did in previous years. However, this is an ESG commitment for 2022 to provide our employees the opportunity to give their time to the causes and communities they are passionate about.

	2017	2018	2019	2020	2021
Funds Donated & Sponsorships	$62,978	$54,851	$35,439	$15,061	$37,397
Volunteer Hours	297	208	125	108	132

Rights of Indigenous Peoples

In the spirit of reconciliation, Pulse is committed to the Truth and Reconciliation Commission of Canada (TRC): Calls to Action, and in particular #92 which gives us a path forward for the business community to adopt the United Nations Declaration on the Rights of Indigenous People (UNDRIP). The commission addresses the need for meaningful consultation and building respectful relationships, long term sustainable opportunities from economic development projects as well as education and training for staff on the history of Indigenous peoples, inter-cultural competency, human rights, and anti-racism. In 2022 Pulse will commit to identifying and building relationships and partnerships with Indigenous owned companies and groups, and providing training for their employees on issues and topics identified above.

PULSE

2022 ESG Priorities and Goals

GOVERNANCE

Board responsible for ESG commitments, with EH and S Committee responsible for driving, measuring, and reporting on initiatives and work that aligns with our material priorities identified in this report

SOCIAL

Revive our Community Service Committee to identify initiatives and organizations that align with our core values and strategic priorities, and promote increased employee participation in volunteer opportunities and confirm our annual donation strategy

Increased personal volunteer days for staff. Provide all staff the time required to take the University of Alberta's Indigenous Peoples Course (or a similar course/learning opportunity)

ENVIRONMENT

We commit to partner with a Canadian organization to both contribute funds to reforestation projects in Western Canada AND hold annual Pulse employee tree planting days

Eliminate 1 warehouse (April 2022) and 1 office space

Identify new opportunities and technologies to continue to reduce our energy consumption

Performance **Table**

Corporate Governance

	2021	2020	2019	2018	2017	GRI disclosure	SASB disclosure
Board Diversity – gender (%)	17%	17%	17%	33%	33%	102-18	
Total compensation ratio – CEO/employees (ratio)	0.47	0.42	0.22	0.24	0.51	102-38	
Political Contributions ($M)	0	0	0	0	0	415-1	
Dividends declared per common share ($/share)	0.0525	0	0	0	0.20	201-1	
Number of data breaches	0	0	0	0	0		SV-PS-230a.3/ TC-SI-230a.1

Economic

	2021	2020	2019	2018	2017	GRI disclosure	SASB disclosure
Economic Performance							
Revenues (Thousands $)	$49,150	$11,349	$24,155	$10,188	$43,525	201-1	
Community Investment	$37,397	$15,061	$35,439	$54,851	$62,978	201-1	
Net Margin (Thousands $)	$21,514	-$6,786	-$3,411	-$1,730	$15,087		

Environment

	2021	2020	2019	2018	2017	GRI disclosure	SASB disclosure
Energy							
Purchased electricity (mWh)	426.7	491.7	444.6	78.2	no data		
Energy Intensity (GJ/TB)	31.5	30.6	24.9	10.9	no data	305-4	
Emissions							
Greenhouse gas emissions – natural gas Scope 1 (tCO_2e)	~0	~0	~0	~0	no data	305-1	
Greenhouse gas emissions – Scope 2 (tCO_2e)	440.6	458.0	384.4	56.0	no data	305-2	
Greenhouse gas emissions intensity (tCO_2e/TB)	2.6	2.7	2.3	1.2	no data	305-4	
water							
Water consumed (m3)	812	1,113	1,326	328	no data	303-5	

People

	2021	2020	2019	2018	2017	GRI disclosure	SASB disclosure
Total number of employees	17	17	19	17	17	102-8	
Permanent employees (number)	16	16	18	16	17	102-8	SV-PS-000.A
Employee diversity – overall (% of female)	23.5%	23.5%	31.6%	35.3%	35.3%	405-1	SV-PS-330a.1
Ratio of basic salary and remuneration of women to men	0.20	0.23	0.31	0.26	0.30	405-2	
Employee hours worked - hours	37.5	37.5	37.5	37.5	37.5		SV-PS-000.B
Turnover for permanent (%) employees	0%	6%	6%	6%	0%	401-1	SV-PS-330a.2
* Employee training – hours per employee (number)	60	72	87	62	77.5	404-1	
Total recordable injury frequency (TRIF – score)	0	0	0	0	0	403-9	
Lost time injury/illness frequency (LTIF – score)	0	0	0	0	0	403-9, 403-10	
Lost time injury/illness severity (LTIS – score)	0	0	0	0	0	403-9, 403-10	
Fatality rate (rate)	0	0	0	0	0	403-9	

** between 2017 and 2021 there was a total of 553 training hours. Some of this is not captured in the table as the year of training stretches across these timelines*

Governance

Governance structure		102-18
Delegating authority		102-19
Executive-level responsibility for economic, environmental and social topics	The Board of Directors will be responsible for overseeing all ESG initiatives and reporting	102-20
Consulting stakeholders on economic, environmental and social topics	As this is our first ESG report we have not yet consulted any stakeholders on ESG topics. External ESG consultants are putting forward recommendations for future consultation with stakeholders as it relates to ESG topics and materiality assessment and reporting.	102-21
Review of economic, environmental and social topics	The HSE Committee will lead all ESG data collection and initiatives with the guidance and approval of the Board of Directors	102-31
Highest governance body's role in sustainability reporting	Final approval of all reporting by the Board of Directors	102-32

Secondary Data reported in 2021 Report

Highlights and Initiatives undertaken in 2021 (and prior)		GRI Disclosure	SASB Disclosure
organizational profile			
External Initiatives		102-12	
Membership Associations	CSEG (Canadian Society of Exploration Geophysicists). The CSEG promotes the science of geophysics, especially as it applies to exploration, and to promote fellowship and co-operation among those persons interested in geophysical prospecting. Activities of the CSEG are primarily directed toward the exchange of technical information. CAGC (Canadian Association of Geophysical Contractors) The CAGC works closely with their members, government, communities, and stakeholders, developing and administering programs to ensure workplace health, safety, and environment, while advocating the highest of ethical standards in the conduct of all business throughout the geophysical industry. CAPP (Canadian Association of Petroleum Producers) advocates for the energy sector and enables the responsible growth, economic competitiveness and safe, environmentally, and socially responsible performance. PSAC (Petroleum Services Association of Canada) is a national trade association representing the service, supply, and manufacturing sectors with the upstream petroleum industry. PSAC advocates for its members to enable continued innovation, technological advancement, and in-the-field experience, helping to increase efficiency, ensure safety and protect the environment. ABMI (Alberta Biodiversity Monitoring Institute) On August 11th, 2021, signs data sharing agreement, in which Pulse will supply 2D & 3D geospatial line data containing seismic line placement, vintage of data, and method of construction, for ABMI to integrate all attributes in their Human Footprint Inventory (HFI) and land cover products. Information provided by Pulse will be used as a reference source on a as required basis to varied end users for scientific analysis, cumulative effects assessments and reporting, land use planning, watershed planning and other related studies and projects. To date, Pulse has provided a total of 600,000 linier kilometers of Alberta, 2D geospatial seismic line data. S.A.I.T (Sothern Alberta Institute of Technologies) Geomatics Engineering Technology Program. Pulse was approached by the Academic Chair of Polytechnic, inquiring if Pulse would like to be involved on the Advisory Committee Group of the Geomatics Engineering Technology program, in which Pulse would work with the committee and instructor for adding a component on Seismic. The program incorporates the theory behind seismic along with the operations of acquiring Seismic. Pulse continues to provide support to this program, which includes an annual presentation to the students.		
Ethics and Integrity			
Values, principles, standards and norms of behaviour	https://www.pulseseismic.com/governance	102-16	
Mechanisms for advice and concerns about ethics	Business Principles and Code of Ethics	102-17	

Data Security

Description of approach to identifying and addressing data security risks	Adopted security best practices based on The National Institute of Standards and Technology framework and used it as a baseline for our risk management program. We have embraced a risk-based approach and as such we are able to measure the risk based on two things: 1. Where the risks exist 2. And how people interact with the risks. Risk Management: • Regular External Security Assessments are completed by a third party. Last assessment was completed in June 2020. Audit recommendations are assessed and deployed. • Regular Internal Security Assessments are continually completed. o Review and audit of user access to ensure access to critical and sensitive data only to authorized users. o Payroll/HR: Ceridian/HRWARE (Canadian, US SSAE16 SOC 1) o Microsoft: Azure/Google Cloud – Multitenant isolation (SOC 1 ISO/IEC 27001 and ISO/IEC 27018) o Microsoft: Office 365 – Multitenant isolation (SOC 1 ISO/IEC 27001 and ISO/IEC 27018) • All Operating Systems and Equipment are continually updated as recommend by Manufacturers Security Best Practices • Two Factor Authentication and conditional access is used to control access. • Redundant layer 7, next generation firewalls are employed at all corporate locations. • Anti-virus software is current, compliant with security best practices and installed on all servers and workstations. • Security awareness training. Employees are regularly made ware of threats and methods used by hackers to reduce their risk both at home and at the office. • Disaster Recovery Planning. Plans are in place to mitigate multiple disaster situations and allow us to get back to running normally in a short period of time. • IT Policies and Procedures are reviewed on annual basis. • Disaster Recovery Planning. Plans are in place to mitigate multiple disaster situations and allow us to get back to running normally in a short period of time. • IT Policies and Procedures are reviewed on annual basis.	SV-PS-230a.1
Description of policies and practices relating to collection, usage, and retention of customer information	Pulse does not store customer data (credit cards, Banking information) and keeps minimal information sufficient to contact and transact with its customers	SV-PS-230a.2

Reporting Practice

Description of business continuity risks related to disruptions of operations (Technology Disruptions)	Our business continuity plan is continually updated to adapt to changes and improvements in technology. In the event of a disaster the following options are available: • All data is stored on redundant local equipment • Daily redundant copies of all data is stored on site • A full air-gapped copy of all seismic data is stored off site and is not accessible via network or Internet • A full copy of all data is stored off site on Microsoft Cloud Storage. Storage is geo redundant meaning that redundant copies of data is stored in multiple Microsoft Data Centers. • All servers are backed up several times per day and can be restored as a functioning server within the Microsoft Cloud.	TC-SI-550a.2

PULSE SEISMIC INC.
ESG REPORT – ADVISORIES

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The term "material" may be used within this report to describe issues for voluntary sustainability reporting that are considered to have the potential to significantly affect sustainability performance in our view and may be important in the view of internal or external stakeholders. However, the use of the word "material" within this report should not be equated with the meaning of the word in other of Pulse's public reporting or filings. With this report, we hope to increase your knowledge of Pulse and our operations. However, this report does not provide investment advice, and readers are responsible for making their own financial and investment decisions. Readers should not subscribe for or purchase any securities of Pulse on the basis of the information contained herein.

There is no single standard system that applies across companies for compiling and calculating the quantity of greenhouse gases and other sustainability metrics attributable to our operations. Accordingly, the information provided in this report may not be comparable with similar information reported by other companies. Our emission statistics are derived from various internal reporting systems that are generally different from those applicable to the financial information presented in our consolidated financial statements and are, in particular, subject to less sophisticated internal documentation as well as preparation and review requirements, including the general internal control environment. We may change our policies or methods for calculating these emissions and other sustainability metrics in the future without prior notice.

This report contains forward looking statements, beliefs or opinions (collectively, "forward-looking statements") which reflect management's views related to future events and circumstances – including those which may relate to Pulse's strategies, focus, goals, ambitions, aims, targets, plans, objectives, operations and results. The use of any of the words "will", "may", "anticipate", "expect", "objective", "believe", "plans", "intends", "potential", "continue", and similar expressions or the negative thereof are intended to identify those forward-looking statements.

Forward-looking statements inherently involve known and unknown risks, uncertainties and other factors which are, in many cases, beyond the control of management and because they relate to events and depend on circumstances that will or may occur in the future. These risks include, without limitation, those risks considered under the heading "Risk Factors" in Pulse's most recent MD&A, audited annual financial statements, management information circular, quarterly reports, material change reports and news releases. Readers are cautioned that although Pulse considers the assumptions used in the preparation of such forward-looking statements to be reasonable and based on reliable information, such forward-looking statements are based on a number of assumptions which may prove to be incorrect. No representation is made as to any future results, levels of activity, performance or achievement since such expectations are inherently subject to significant business, economic, competitive, political and social uncertainties and contingencies. There are a number of factors that could cause our actual results levels of activity, performance or achievement to differ materially from those expressed or implied in any forward-looking statements made in this report. Nothing in this report constitutes or should be relied upon by a reader as a promise or representation as to the future or as to past or future performance. Past performance of Pulse is not necessarily indicative of and cannot be relied on as a guide to future performance.

We have included the forward-looking statements in this report in order to provide readers with a more complete perspective on our future operations and such information may not be appropriate for other purposes. Pulse disclaims any intention, responsibility or obligation to update or revise any forward-looking statements set forth in this report, whether as a result of new information, future events or otherwise, except as required by law.

2021

PULSE

Sustainability & ESG Report

This report was prepared by

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