



Sustainability Through Innovation

ESG 2021

Annual Report to Stakeholders

February 22, 2022

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About This Report

This is Fluid's second sustainability report. It includes data from 2019, 2020 and 2021 where available. Parts of this report include Fluid's 2022 ESG aspirations. We are committed to improving measurement and data quality of all material ESG metrics.

This report has not received third party assurance; however, all content has been reviewed by Fluid's Senior Management and approved by the Executive Team and Board of Directors.



CEO's Message



A handwritten signature in dark ink, appearing to read 'CP', positioned above the name and title.

Clay Purdy
Chief Executive Officer

On behalf of Fluid, I am proud to share with you our second annual Sustainability report. In it you will find information about Fluid's commitment to Environmental, Social and Governance (ESG) issues, sustainability, safety, quality and corporate responsibility.

Through substantial investments in technological innovation, infrastructure and our people, we are committed to: reducing carbon emissions, energy consumption and waste; helping our partners achieve sustainability and deliver lasting change; and accelerating the world's transition to a circular economy.

I am proud of how our global team has responded in the face of adversity caused by the COVID-19 pandemic – safely executing our business, maintaining our commitments to our shareholders, stakeholders and Indigenous communities, and never compromising on our commitment to responsible business practices.

Fluid has always valued strong ESG performance. Today, we recognize in our industry that ESG excellence is the new base-level requirement to operate, as well as a strategic driver that is imperative to our long-term success. This begins with having a robust **governance** framework. Equally important is our **social** performance and delivering on our commitments of providing a healthy, safe and inclusive environment for our people, building strong and lasting relationships with Indigenous Peoples and our stakeholders, and contributing positively to our communities. Through continuous improvement, innovation, and the application of clean technology, Fluid is committed to further minimizing our own **environmental** impact and that of our customers and partners. This commitment includes reducing freshwater use, minimizing land disturbance, and limiting waste and pollution creation.

By specializing in the development of eco-friendly, low-hazard, technically advanced chemical systems and processes, we are helping partners meet their net-zero goals. Together we are meeting the needs of the present without compromising the ability of future generations to meet their own needs.

About Fluid

Established in 2011 in Calgary, Alberta, **Fluid Energy Group Ltd.** is a leading developer, manufacturer and distributor of sustainable, technically advanced chemical products to the world. We have an international reach through an established network of strategic partners and distributors. Fluid has manufacturing facilities and partnerships positioned in key markets around the world. Established on principles of researching and developing safer, eco-friendly, patented chemical technologies and methods, the Fluid team is comprised of master's degree chemists, PhD scientists, engineers and operational experts committed to a better, cleaner, sustainable future.

Fluid's corporate research and manufacturing facilities are located in Calgary, Alberta and, at more than 130,000 square feet, are a hub of innovation and superior quality manufacturing. High standards of quality are evidenced by facility design, detailed operational procedures, attention paid to optimizing production, controls over labelling and packaging, product traceability, and post-sale customer care commitments.

With a proven track record of product development and superior service delivery, Fluid technologies and contract manufacturing services are used across multiple industry verticals including HI&I (home, industrial and institutional), water treatment, energy and petroleum, food and beverage, construction and coatings, life sciences, and marine and transportation.

At Fluid, we are driven to solve problems identified by our customers and the markets more broadly. Our mission is to create products that are effective, technically advanced, and minimize impact to our environment while providing the highest levels of quality and safety.

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Products & Services

Fluid manufactures and distributes its portfolio of eco-friendly technologies to product manufacturers, industrial operators and various institutions from multiple segments around the world. Our products offer superior performance over incumbents while replacing hazardous commodity chemicals commonly used in all markets and industries, globally.



Construction & Coatings

Range of **safe and effective products** for stripping, etching, coating and sealing concrete. Products eliminate or greatly reduce corrosion as well as **environmental and human related liability**.



Energy & Petroleum

Extensive portfolio of **innovative, patented and proven onshore and offshore technologies** that solve the toughest challenges faced by the energy sector, **while increasing production and greatly minimizing liabilities**.



Clean-In-Place (CIP)

Safe and effective technologies to descale, clean and sanitize processing equipment. Product options and combinations that **reduce corrosion, contamination and storage concerns**. Portfolio includes 2-in-1 (caustic and descaling) systems designed to reduce cleaning cycles.



Government

Safe and effective proprietary technologies to **replace harmful commodity chemicals** commonly used across multiple industries.



Household, Industrial & Institutional

Broad range of HI&I cleaning technologies including **innovative solutions** for clean-in-place, surface care and vehicle care, including **corrosion protection** for precious metals.



Life Sciences

Health Canada (NPN, DIN) authorized products manufactured under an **NHP Site License with GMPs** and comprehensive tracing (DEL and ISO 17025 certifications underway).



Marine & Transportation

Range of **safe and effective products** suitable for cleaning, descaling, rust removal, odor control, corrosion prevention in boilers, heat exchangers, and water treatment systems on marine vessels and vehicles. Scrubber technology for industrial applications.



Water Treatment

Broad portfolio of **proprietary technologies to solve tough water treatment challenges** including sulfate scales (barium and more), corrosion, pH adjustment and microbial activity.



Mission, Vision and Values

Fluid's sustainability commitment encapsulates our overall Mission, Vision and Values as they relate to material aspects that affect us and our society. We strive to meet the needs of the present without compromising the ability of future generations to meet their own needs.



Our Mission

We endeavor to create products that are effective, technically advanced, and minimize impact to our environment while providing the highest level of quality and safety.



Our Vision

To be a respected and globally recognized developer of innovative, safe and sustainable technologies and products.



Our Values

Create - We innovate new and better products and technologies.
Collaborate - We foster respect and trust with each other and our stakeholders.
Care - We continually improve to operate safely and protect our environment.

Memberships & Commitments to External Initiatives

Fluid is strongly committed to supporting many regional, national and broader social imperatives through charitable donations, corporate sponsorships, memberships, and other forms of contributions. Feature memberships and commitments include:



NACD /// The National Association of Chemical Distributors keeps a close and active watch on the important regulatory issues facing our industry by participating in a number of industry coalitions, submitting comments to federal and state regulatory agencies on behalf of its membership, and advocating for sensible and safe regulations.



International Chemical Trade Association AISBL /// Aside from taking responsibility for the safety of their own operations, the chemical distribution industry communicates with its customers and suppliers about risk management measures and safe use. The International Chemical Trade Association AISBL represents the chemical distribution industry and promotes the safe and sustainable use of chemicals to benefit to you and the environment.



ISO /// International Organization for Standardization ISO International Standards ensure that products and services are safe, reliable and of good quality. As an ISO 9001:2015, 14001:2015 & 45001:2018 certified company, Fluid takes great pride in adhering to a globally recognized quality management system. The ISO 9001 family is the world's most well-known quality management standard for companies and organizations of any size. The ISO 14000 standards provide a guideline or framework for organizations that need to systematize and improve their environmental management efforts. ISO 45001 certification is an ISO standard for management systems of occupational health and safety whose goal is the reduction of occupational injuries and diseases.



Good Manufacturing Practice /// Good manufacturing practice (GMP) is a system for ensuring that products are consistently produced and controlled according to quality standards. It is designed to minimize the risks involved in any pharmaceutical production that cannot be eliminated through testing the final product. SciencePak™ follows strict quality assurance and quality control standards as well as GMP Standard Operating Procedures and adheres to all government and regulatory standards in all aspects of its business. In June of 2021, the company was issued an NHP Site License for manufacturing, packaging, and labelling of natural health products in Canada. DEL Certification is in progress planned for H1 2022.



Intrinsik /// Intrinsik Corp. is a recognized leader in the field of human health risk assessment, ecological risk assessment and environmental toxicology. Areas of expertise include multi-media exposure modeling, probabilistic risk analysis, landscape scale risk assessment, toxicity evaluations and development of toxicological benchmarks.



ESG Framework

The terms Sustainability and ESG have certainly gained popularity in recent years, but at Fluid they are not new concepts. Both have been a part of our DNA for the past decade as we drove the development of greener chemistries, safer practices, lower waste and less pollution. Now we are also driving the development of carbon neutral biofuels and bioproducts – always maintaining our tradition of innovation and environmental stewardship along the way.

Fluid's cross-functional focus on 27 of 39 core ESG aspects has resulted in repeated year-over-year improvement since official performance tracking began in 2019.



Environmental

GHGs & Climate Change	Natural Resource Protection	Waste & Pollution	Land & Environment Use
Carbon Emissions	Fresh Water Systems Stress	Toxic Waste & Emissions	Clean Tech
Carbon Footprint Reduction	Raw Material Sourcing	Packaging & Material Waste	Biodiversity & Land Use
Financing Environmental Impact	Water Re-Use	Electronic Waste	Green Building
Climate Change Vulnerability			Renewable Energy



Social

Human Capital	Safety & Liability	Stakeholder Engagement	Communities & Social Opportunities
Diversity & Inclusion	Safety Performance	Controversial Sourcing	Charitable Giving
Health & Safety	Chemical Safety & Sustainability	Community Relations	Two Way Communication
Labor Management & Development	Product Safety & Quality	Renewable Carbon Index	Health Care
Supply Chain Labor Standards	Privacy & Data Security		Nutrition & Health
	Responsible Investment		



Governance

Structure & Oversight	Corporate Behaviour
Board	Business Ethics
Pay	Financial System Stability
Ownership	Corruption & Instability
Reporting	Anti-competitive Practices
	Accounting & Tax Transparency



ESG /// Environment

Why is this topic relevant to our business? As we look toward what is next – and the world we want to leave to future generations – we realize there is always room to think bigger and better. Greenhouse gases, waste/pollution, water use and land use were identified by Fluid’s stakeholders as the most important aspects of the organization’s sustainability program.



GHG Reduction & Climate Change

We are committed to lowering greenhouse gas emissions in all industries that we serve and will continue to create long-term value on our journey to help others lower their impact on the environment.



Waste & Pollution

We research, develop and deploy products with higher biodegradability levels and lower bio-accumulative effects than other toxic materials currently and historically utilized.



Water Use & Protection

We innovate solutions to help our partners reduce annual consumption of water by billions of gallons and we are committed to finding ways to significantly decrease the amount of waste/effluent generated in our customers’ operations.



Land Use & Environmental Protection

We use a land and environmental assessment tool to identify and assess environmental risks in the industries we serve and we focus on continuous performance improvement through investment in new technologies and innovation, comprehensive practices, and collaboration with various groups.

Our Goals

- ✓ Reduce internal GHG emissions 30% by 2023 (from 2019 levels)
- ✓ Develop plastic recycling and sustainability strategy and set a target by 2023
- ✓ Develop a strategy for sourcing or creating greener alternatives to inputs currently procured for use in product formulation by 2023
- ✓ Decrease internal fresh water use by 30% by 2023 (from 2019 levels)
- ✓ Develop recycled water strategy and set target by 2023
- ✓ Develop Loss of Containment (“LOC”) reduction strategy and related target by 2023

12 Principles of Green Chemistry

As one example of our commitment to the environment, in 2019 Fluid formally adopted the 12 Principles of Green Chemistry as well as the Renewable Carbon Index (RCI) in order to assess attributes and validate claims of sustainable chemicals and ingredients.



The **Renewable Carbon Index** measures sustainability by dividing the number of carbons derived from renewable sources by the total number of carbons in an active ingredient. A high RCI product or material, for example, contains a high percentage of carbon atoms from natural and renewable sources. Accordingly, Fluid and SciencePak are transforming the Life Sciences industry by employing sustainable ingredients to create highly effective products that tackle challenges and are gentle on the environment.

We partner with industry leaders to enhance our expertise as we utilize Life Cycle Assessments to measure and ensure our solutions are based on science, sustainable and reduce our environmental impact across all industries. By focusing on sustainability throughout every step of the process, Fluid and SciencePak create solutions that offer outstanding performance with a reduced impact on the environment.

ESG /// Social

Why is this topic relevant to our business? As part of Fluid's purpose-driven culture, we strive to develop respectful and positive relationships with our employees, contractors, suppliers, customers and local communities, and to contribute positively to society.



People, Diversity & Inclusion

We are committed to enhancing workplace diversity, fostering a workplace representative of the resident population we serve and removing barriers for diverse employees in recruitment, advancement and retention.



Safety Management

Safety is a core value emphasized through strong leadership and workforce participation at all levels. Management and supervisors spend significant time fostering our frontline-driven safety culture, where every employee contributes to a safe workplace.



Stakeholder Engagement

Our stakeholder group is diverse, spans four continents and includes more than 500 customers, partners, vendors, industry regulators, governments, academia and non-governmental groups. We work together with these groups to identify opportunities for education and training, employment, business development and community investment.



Communities & Social Opportunities

We are committed to a long-term presence in the communities where we operate. We regularly engage with local communities to create shared value and work together to ensure a sustainable world we can all enjoy.

Our Goals

- ✓ Women and visible minorities will comprise no fewer than 30% of all key leadership roles annually by 2023
- ✓ By 2025, 100% of contractors will have local indigenous inclusion commitments, where applicable
- ✓ Achieve top-quartile safety performance with 0 serious incidents across all business units by 2023
- ✓ Develop and implement a targeted approach to measure the impact of sustainability and community investments by 2023
- ✓ Employee volunteer hours will exceed 10 hours per person per year annually by 2023

Health & Safety

At Fluid, safety is a core value emphasized through strong leadership and workforce participation at all levels.

Approximately 40% of Fluid employees touch some aspect of the formulation of our strategy for safety. We take a collaborative and participatory approach to achieve the maximum buy-in we can from our employees. Representation from hourly operations, supervisory, office, in-the-field staff, senior and middle management work within our team-based committees, including the Health and Safety Committee. All employees have aspects of the HSE system in their personal goals which are formally reviewed at regular intervals throughout the year. Employees are incented to complete their personal safety goals as well as those of the overall company performance.

In 2021 we are reporting zero lost time incidents (LTI), a great improvement showing the progress of implementing our H&S protocols and policies in our global operations.

Fluid aims to have a proactive safety culture. There is a strong focus on near miss reporting at each of our facilities, and Fluid employees are encouraged to report near misses under Fluid's 'no blame culture'. This enables us to take preventive action before the issues escalate to incidents or accidents. We also measure other proactive leading indicators of health and safety performance.

Fluid bases its health, safety and environment policy on the following criteria:

- > Fluid's ability to meet challenges in relation to health, safety and the environment is a key factor for the company's future
- > Fluid maintains high HSE standards
- > Fluid respects people and the environment
- > Fluid ensures relevant laws and regulations are followed and monitors this through regular audits
- > Fluid has a system for measurable HSE parameters which ensures continual improvement



ESG /// Governance

Why is this topic relevant to our business? Corporate governance that is aligned with Fluid's purpose and focused on reducing risk exposure increases our competitiveness as a company while creating long-term value and resiliency for all our stakeholders.



Structure & Oversight

Our Board of Directors oversees management's risk identification assessment and mitigation processes, including review of long-term strategic and operational planning, executive development and evaluation, code of conduct compliance, regulatory compliance, safety and environmental compliance, financial reporting and controllership, and information technology and security.

Our Management Committee is responsible for the identification, assessment and management of risks and opportunities.

Our Environmental, Social and Governance Committee provides internal stewardship reports to the Board, reporting on sustainability performance, key indicators and actions taken to mitigate risks.



Code of Business Conduct & Ethics

Having a strong ethical business culture is core to our business, allows us to focus on our performance and supports all our other business functions. We believe that acting ethically builds and maintains the trust of our people, our communities and our investors. At Fluid, we pride ourselves on our reputation as an ethical, high-performance company, employer, partner, and member of the communities where we operate.

Our Goals

- ✓ All employees will complete mandatory Code of Ethics training annually by 2023
- ✓ Maintain our zero tolerance policy for corruption and bribery



List of Material Topics

MATERIALITY ASSESSMENT



In late 2020, we conducted our first materiality assessment using frameworks from the Sustainability Accounting Standards Board (SASB), the Task Force on Climate-related Financial Disclosures (TCFD), and the United Nations Sustainable Development Goals for reference. We took industry peers, trends and initiatives into consideration, and finally, we consulted with external stakeholders and incorporated their feedback into this assessment.

The results have allowed us to prioritize the ESG topics most impactful and relevant to Fluid and our stakeholders:

- **Safety Management**
- **Water Use & Protection**
- **Waste & Pollution**
- **GH Emissions & Climate Change**

Fluid's ESG committee approved the four key topics that are deemed to be the focus areas of greatest importance to our stakeholders and could potentially have a significant impact on Fluid's long-term value proposition. Fluid anticipates reviewing our materiality assessment every two years through active dialogue with our stakeholders to ensure all voices are heard. Based on stakeholders' input, we expect the materiality assessment to continually evolve.

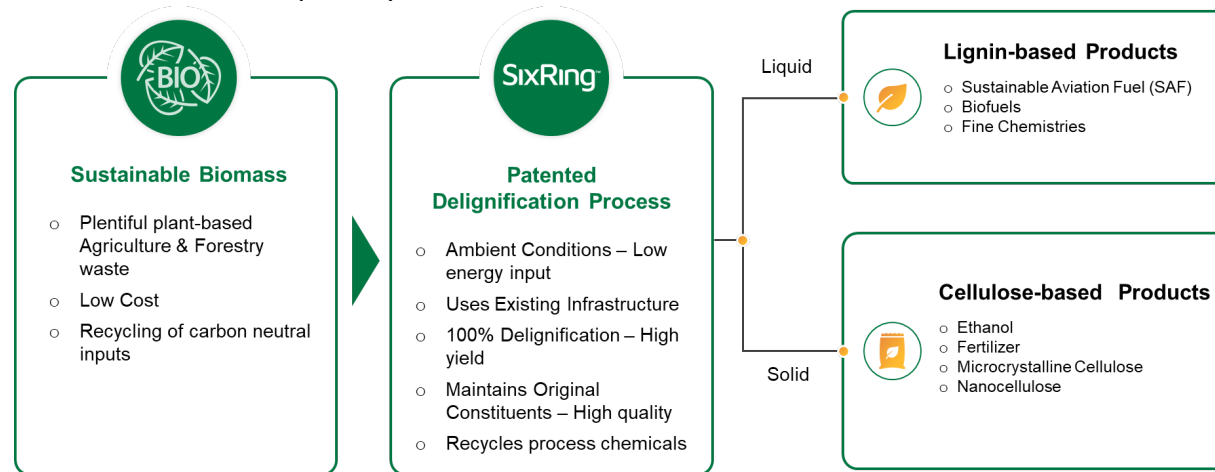
Fluid's ESG Assessment

		2021 Score	2020 Score	2019 Score
Environmental Commitment				
GHG Reduction & Climate Change	Helping partners lower their greenhouse gas emissions	B+	B+	B-
Water Protection	Reducing fresh water consumption by billions of gallons annually	A-	A-	B+
Waste & Pollution	Products with higher biodegradability and lower bio-accumulative effects	A-	A-	B+
Land & Environmental Use	Utilizing a land and environmental assessment tool to identify risks	B+	B+	B
Social Commitment				
People, Diversity & Inclusion	Enhancing workplace diversity, removing barriers, promoting inclusion	A-	A-	C
Safety Management	Frontline-driven safety culture where all employees can contribute	B+	B+	B-
Stakeholder Engagement	Working with all stakeholders, continuously	B	B-	C+
Communities & Social Opportunities	Supporting communities to create shared value and sustainability	A	A+	B
Governance Commitment				
Structure & Oversight	Providing stewardship and reporting on sustainability performance	A-	B+	D
Corporate Behavior, Conduct & Ethics	Acting ethically while building and maintaining trust	A	A	B
		B+	B	C



SixRing™

SixRing™ Inc., a biotechnology division of Fluid Energy Group®, is dedicated to the development of a suite of patented chemicals, formulas, methods and processes to contribute to global sustainable development. The new technologies are applied to a wide variety of sustainable biomass for the manufacture of functional materials, renewable fuels and specialty chemicals.



The proprietary SixRing™ methods and chemistries utilize sustainable biomass to produce:

- Bioethanol (Biofuel)
- Sustainable aviation fuel (SAF) and biomass fuel
- Cellulose-derived advanced materials and petro-chemical fine chemistries
- Numerous other important fine chemistries for the food and pharmaceutical industries

Bioethanol is the most widely produced renewable fuel in the world today. Current fuel-grade bioethanol is made from corn starch, sugar cane, sorghum, wheat, barley and potatoes – competing directly with the food chain.

SixRing's carbon-neutral biofuel production does not compete with the food chain and can utilize all waste and industrial wood as well as crop-based feedstocks.



The SixRing™ process is applicable to **all waste and industrial wood and crop based feedstocks**.



Enables **conversion of sustainable biomass to “drop-in” sustainable aviation fuel (SAF) and/or biofuels**.



Carbon neutral, zero waste, globally scalable, built to integrate into current industry, economical technology portfolio.



Technology provides for the **economic production of high-quality biofuels**, with a **net-energy gain** due to the processes not requiring heat, pressure or temperature common in all other delignification processes, while **retaining all valuable constituents**.



Demonstrated the techno-economic viability of the integrated process.

SciencePak™

SciencePak™ Inc. is Fluid's dedicated and experienced contract development and manufacturing organization (CDMO). Providing R&D, technical consulting, manufacturing and packaging services with a focus on quality control and quality assurance, SciencePak is a fully GMP certified facility for the Pharmaceutical, Food, and Life Sciences industries.

In response to the Covid-19 pandemic in early 2020, Fluid quickly shifted its focus to the manufacture and distribution of high quality hand sanitizers and surface disinfectants to ensure the safety of frontline workers and emergency personnel. Under its Natural Health Product (NHP) site license, SciencePak has continually introduced technically superior, eco-friendly and biodegradable cleaning solutions under its Triton™ family of products – authorized for sale by Health Canada.

Pictured below: **SciencePak™** laboratory and QC facility, which accompanies a dedicated GMP production/warehouse/lab space, a Risk 2 Human Pathogen & Toxin Licensed lab, and MasterControl Quality Management System.



Pictured below: **Triton™** brand Life Sciences products including liquid hand sanitizer, ***NEW*** MSX-Ultra hard surface disinfectant, and ***NEW*** Clean Shots™ single-serving hand sanitizer gel.



Hand Sanitizer
950 mL



MSX-Ultra
950 mL



Single-serving hand sanitizer sachets that go anywhere and easily fit inside a pocket or purse

Responsible Chemical Evolution™

Protecting People



Non-corrosive products safe for skin

Eco-Friendly and Sustainable



Biodegradable products safe for the environment

Low Fuming



Products formulated to reduce harmful vapors

Transformative



+190 patents for superior sustainable technologies

Water Conservation



Products designed to minimize water usage

CO₂ Reduction



Shippable as concentrate for transportation efficiency

About This Report

Published in February 2022, this report represents Fluid's second formal sustainability communication to stakeholders.

For questions about Fluid's sustainability program, please contact President and Chief Sustainability Officer, Chad Leier, at chad.leier@fluidenergygroup.com.

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