



# 2019 **ESG** Report

Environmental, social, and governance issues report





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## MESSAGE FROM THE CEO

We all are faced with the growing recognition that Gross Domestic Product produced at the expense of the environment and finite physical resources overstates the net contribution of that economic output to our overall prosperity. A sustainable development model that integrates economic growth with social and environmental responsibility, aptly described more than thirty years ago by the Brundtland commission as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” is what we all at Xebec need to work towards. This definition shall guide us in our strategic and operational choices.

Today, Xebec is fortunate to be enjoying a period of unprecedented growth, fueled by the growing demand for clean energy solutions that address the pressing systemic risks associated with a changing climate. But this has not always been the case. The years following the 2008 financial crisis were difficult ones that drove home the fact that profits are a necessary condition to a company’s very existence. We have come to realize that corporate profits are not only essential to our survival, they are a key component towards the achievement of our social responsibility, through paying taxes, creating innovation and jobs, and contributing to local communities in a meaningful way. Even though we did not always have the means to act, we never abandoned our ambition of reconciling our business interests with our economic, social, and environmental responsibility.

Integrating the concept of sustainability into our business has become a must. Today, we provide clean technology solutions that deliver low-carbon renewable gases, and we strive to do so as efficiently as possible, in proportion to the means at our disposal.

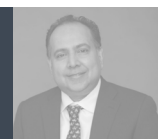
A company’s size should not be a deterrent to integrating sustainability, and I am proud to introduce Xebec’s first ESG report. For us, it constitutes a baseline. It establishes a practice of accountability on sustainability-related issues that are intrinsic to our company’s long-term success. It constitutes a tool for continuous improvement in how we conduct business and measure our performance. We have begun to clearly identify the issues that matter most to our business and articulate how we manage them. We recognize that there is much more that we can and will be doing in the future. As we move forward, we intend to set baselines, measure our performance, and set targets for these issues. We also intend to consult with our stakeholders to gain a better understanding of the issues that are most important to them and use this knowledge to expand and refine the list of material issues we explicitly manage and report on.



**KURT SORSCHAK**

CHAIR OF THE BOARD, CEO AND PRESIDENT

**Generating positive impact** — Sustainable development ultimately aims to address the major challenges we face, for a fairer, more prosperous world. As a company, I believe that one of the most significant roles we can have is addressing the growing wealth gap by redistributing the wealth we create to our stakeholders, and particularly to our employees and their families. This is largely the motivation behind the employee pension plan and share purchase plan we implemented in the first half of 2020.



*“Every day we wake up wanting to make the environment better. That’s how we operate as well.”*

Prabhu Rao, PhD  
Chief Operating Officer



## ABOUT THIS REPORT

This is Xebec's first annual report on our material environmental, social, and governance (ESG) issues.

It covers the activities of the Company and its subsidiaries for the 12-month period ended December 31, 2019, consistent with our most recent Management's Discussion and Analysis and consolidated financial statements.

We have chosen to base our reporting on our material ESG issues on the standards of the Sustainability Accounting Standards Board (SASB)<sup>(1)</sup> for the Industrial Machinery & Goods industry of the Resource Transformation sector, as defined by SASB's Sustainable Industry Classification System®; these serve to determine the specific material ESG issues we report on. We have also used the framework provided by the Task force on Climate-related Financial Disclosures (TCFD)<sup>(2)</sup>; these serve as a guide to the context and narrative we provide for our sustainability approach in general and how we address each material issue specifically. While this initial report is only in partial compliance with either of these references, we believe that the measures we are taking to bring structure and process to the integration of sustainability considerations in the conduct of our business will lead to improved reporting year over year.

The contents of this report were reviewed by the executive management team and the Board of Directors. However they have not been externally assured, with the exception of financial information stemming from our audited financial statements for the year ended December 31, 2019. Unless otherwise stated, all dollar amounts are in millions of Canadian dollars.



**For more information about this report or about our sustainability approach and our material ESG issues, please contact [info@xebecinc.com](mailto:info@xebecinc.com).**

- (1) The Sustainability Accounting Standards Board (SASB) is a US-based non-profit organization that has established industry-specific disclosure standards across environmental, social, and governance (ESG) topics in order to facilitate communication between companies and investors about financially material, decision-useful information. ([www.sasb.org](http://www.sasb.org))
- (2) The Task Force on Climate-related Financial Disclosures (TCFD) was established by the international Financial Stability Board to develop voluntary, consistent climate-related financial risk and opportunity disclosures for use by companies in providing information to investors, lenders, insurers, and other stakeholders. ([www.fsb-tcfd.org](http://www.fsb-tcfd.org))





# Our **vision** is a world powered by clean energy

## ABOUT THE COMPANY

Xebec Adsorption Inc. (“Xebec” or the “Company”) is dedicated to help our world transition to a low-carbon future by accelerating the production of renewable gases.

We specialize in compressed air and gas, developing products and technology solutions for environmentally responsible gas generation, purification, dehydration, separation, and filtration applications.

More specifically, we provide gas purification solutions, namely for the production of renewable natural gas, natural gas dehydration and purification, field gas, and hydrogen purification solutions for the fossil fuels displacement markets. Our products transform raw gases into marketable sources of clean energy. (Please refer to page 13 for the revenue breakdown of our business activities)

### CLEANTECH SYSTEMS

We provide end-to-end systems for gas purification and the generation of renewable gases such as renewable natural gas and renewable hydrogen

### INDUSTRIAL SERVICE AND SUPPORT

We service, support, and operate air and gas treatment products like compressed air and gas dryers, oxygen and nitrogen generators, filtration products, as well as cleantech system installations

### INFRASTRUCTURE

We plan to invest in, build, own, and operate renewable gas assets



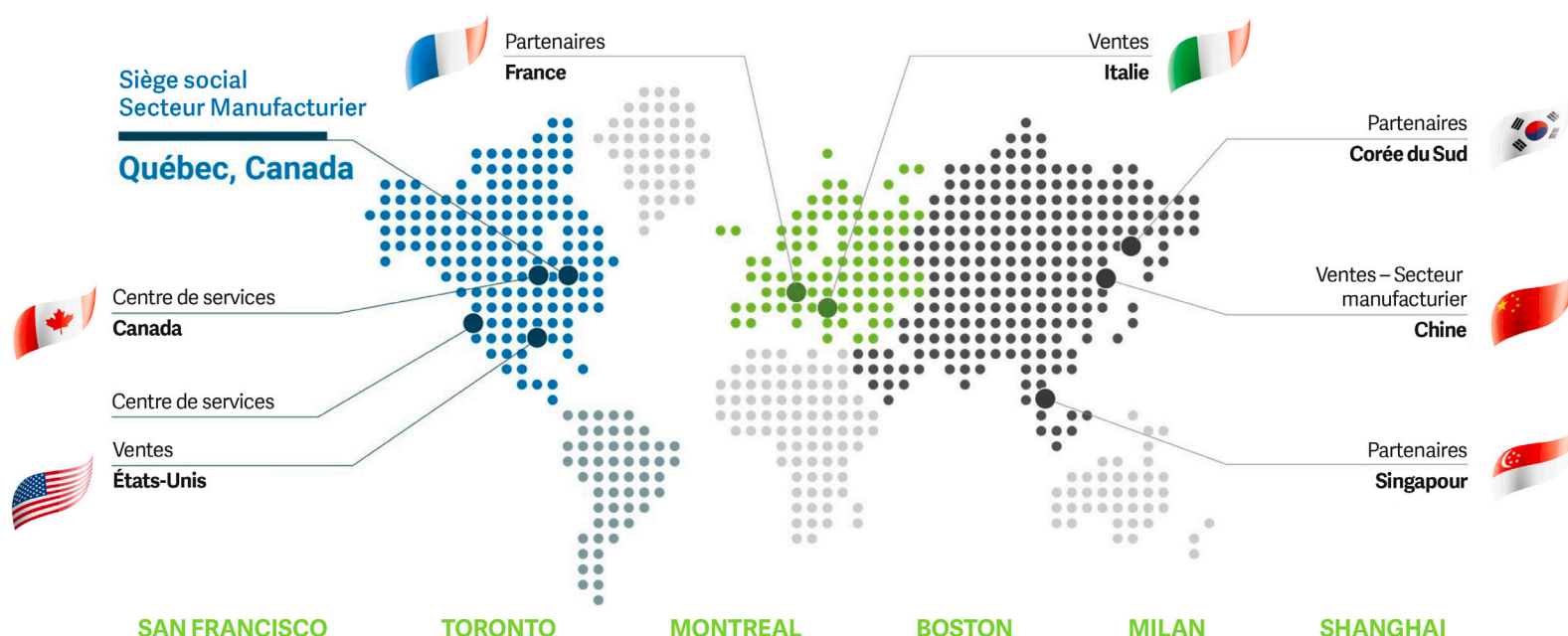
Established in 1967,  
Xebec has over

**50** years of  
experience  
in adsorption  
technology,

supplying more than

**9,000**  
units to over

**1,500**  
clients worldwide



By gender		
Male	120	75 %
Female	40	25 %
TOTAL	160	100 %

By geography		
Canada	110	69 %
United States	6	4 %
Italy	23	14 %
China	21	13 %
TOTAL	160	100 %

**160**  
employees located  
globally as of  
December 31, 2019



For more information about our activities,  
please refer to our [2019 Annual Information Form](#)



## A company in transition: from survival mode to exponential growth

Xebec's origins date back more than 50 years, when it began as a manufacturer of air purification equipment. In 2009, it diversified into the cleantech sector with the reverse takeover of publicly listed QuestAir Technologies, acquiring an impressive portfolio of gas purification and renewable gas production technologies. This transaction came on the heels of the global financial crisis and ensuing economic recession. It was also an idea before its time, as global awareness of climate-related risks was only beginning to gain momentum. As a result, Xebec experienced a difficult period, both operationally and financially, up until 2017, when the growing focus on the transition to a low-carbon economy reached critical mass, resulting in a surge in demand for the Company's end-to-end solutions for gas purification and renewable gas production. As a result, Xebec has been experiencing very rapid growth in both revenues and profits. Through internally generated funds and additional financings, it is building the financial resources to capitalize on its climate-related opportunities, pursuing more and larger contracts, and implementing more rigorous management processes throughout the Company.

## Our sustainability approach

Xebec abides by the Brundtland Commission's definition of sustainability, that is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." This definition guides us in our strategic and operational choices and in reconciling our business interests with our economic, social, and environmental responsibilities. We seek to operate in ways that secure our long-term economic performance while avoiding short-term behavior that is socially detrimental or environmentally wasteful.

Furthermore, we strive to create, along with many of our industry partners and competitors, leading-edge technologies that meet or exceed the requirements of regulation and industry codes and standards to shift industries to alternative fuels, delivering low- or zero-emission fuel solutions that will meet the demand for high-efficiency, high-performance, and low-carbon needs.

We are committed to a continuous improvement process of managing, measuring, and reporting on those ESG issues that are critical to our business activities. We have begun the process of explicitly identifying such issues and integrating them into our governance and management processes, and to more clearly measure and communicate how we perform on them to our stakeholders including our Board, employees, shareholders, capital providers, governmental agencies, and the general public. This first report serves as a major steppingstone in delivering on this commitment.

### List of memberships and associations

- American Biogas Association
- AQPER (Association québécoise de la production d'énergie renouvelable)
- Canadian Biogas Council
- CCBC (Canadian China Business Council)
- Canadian Hydrogen and Fuel Cell Association
- Coalition for Renewable Natural Gas
- Consorzio Italiano Biogas
- Ecotech Quebec
- QG100 Network
- SWANA (Solid Waste Association of North America)



*“The younger generations are paying attention to this; they care about working for a company solving environmental issues and creating a healthy planet.”*

Amir Ghasdi, Director,  
Business Development,  
Advanced Gas Purification  
Systems

## Identifying our material ESG issues

We have chosen to jump start our sustainability reporting practices by applying the SASB standards, because we have found that the ESG issues they have identified as material for the Industrial Machinery & Goods industry are indeed material to our business activities and prospects. We have also added climate change as a material issue on which to report, given our strategic focus on transitioning the economy to a low-carbon future by accelerating the production of renewable gases, in order to address this unprecedented global systemic risk.

We understand that materiality is a dynamic concept that requires us to periodically revisit the risks and opportunities that are most significant to our business. For example, issues like product safety, employee attraction and retention, and corporate culture are also the focus of ongoing monitoring by management. In addition, we intend to consult with our stakeholders to gain a better understanding

of the issues that are most important to them, and use this knowledge to expand and refine the list of material issues we explicitly manage and report on.

## Material issues addressed in this report

- Climate change
- Energy management
- Employee health & safety
- Fuel economy & emissions in use-phase
- Materials sourcing
- Remanufacturing design & services



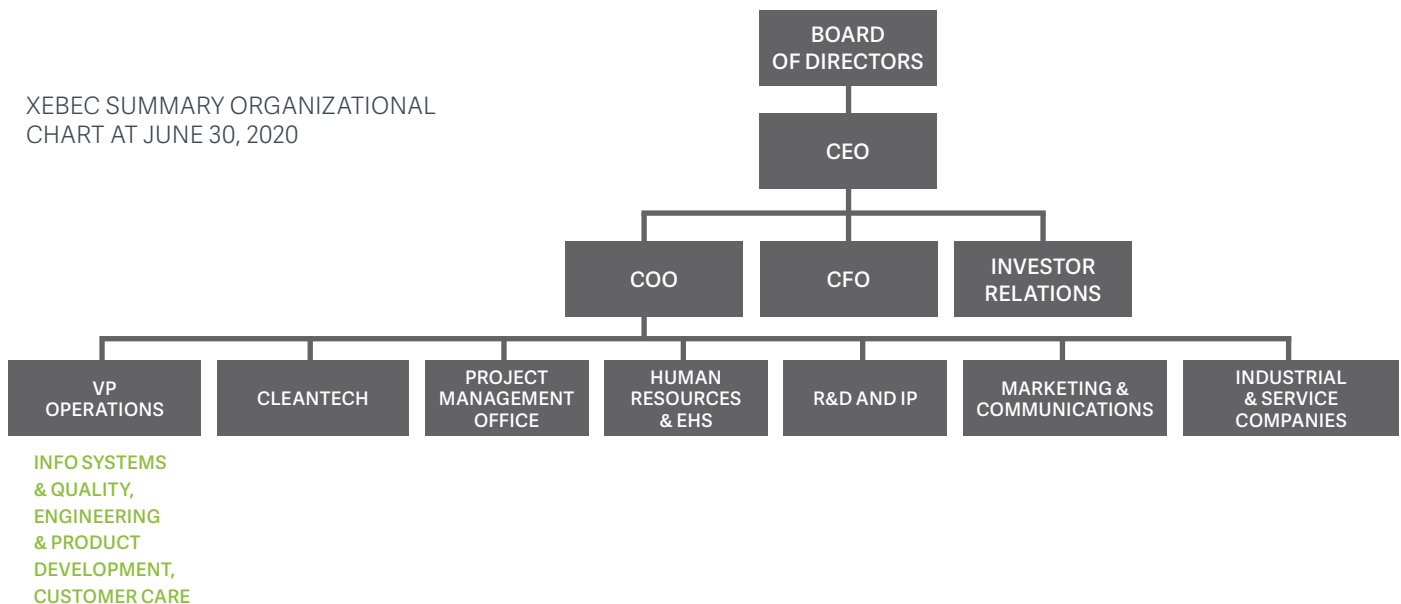


## CORPORATE GOVERNANCE

Xebec's Board of Directors is composed of six directors, four of which are independent, i.e. having no direct or indirect relationship with the Company that could reasonably be expected to interfere with the exercise of independent judgment. Because the Board is Chaired by the Chief Executive Officer and President, an independent Lead Director has been appointed.

By the very nature of its business activities, the issues of climate change and energy policy are specifically addressed by the Board of Directors, as they pertain to the strategic business opportunities the Company is seeking to capture. Other sustainability-related issues may be addressed on an ad hoc basis, and the Board is keen to receive more systematic and granular information on the Company's material issues through a more formal reporting process, of which this report is the first step. However, no director or Board committee currently has explicit sustainability or ESG oversight.

XEBEC SUMMARY ORGANIZATIONAL  
CHART AT JUNE 30, 2020



Reporting on operating issues, including progress on goals, risks, or incidents are channeled by the various divisions through weekly meetings with the Chief Operating Officer (COO), who reports to the Chief Executive Officer (CEO) monthly. Reporting financial performance is channeled to the Chief Financial Officer, who also reports to the CEO monthly. The CEO and COO report operating and financial performance to the Board at least quarterly.



*“Recognizing the strategic benefits of gender diversity, we are committing to adding at least two women Board members by the end of 2020, and will seek to count at least three women directors within the next two years.”*

Kurt Sorschak, Chair of the Board, CEO and President

**Enterprise risk management:** The Company does not have a formal enterprise risk management process. The COO has responsibility for identifying and assessing business risks. These are captured through the reporting process described above and managed on an ongoing basis by the CEO and COO. Any risk deemed significant will be brought to the attention of the Board, also on an ad hoc basis.

To strengthen our internal reporting, risk management, and regulatory and policy compliance, we are currently in the process of implementing a new Enterprise Resource Planning (ERP) system. We have also hired one of the large accounting firms to develop and implement a system of internal financial controls, which will be compliant with securities regulation 52-109 (Certification of Disclosure in Issuers’ Annual and Interim Filings). These are necessary to enable CEO and CFO certification of our annual and interim disclosures in view of Xebec’s anticipated uplisting from the TSX Venture Exchange to the Toronto Stock Exchange in the fourth quarter of 2020.

Furthermore, as the Company’s operating priorities shift from ensuring its viability to managing its very rapid growth and implementing more formal systems and processes, management expects to articulate its sustainability-related priorities more formally. In turn, these are expected to be reflected as specific Board agenda items.



For more information about our corporate governance practices, including board composition and director biographies, please refer to Xebec’s [2019 Management Information Circular](#)



## STRATEGY

As mentioned above, we strive to create leading-edge gas generation, purification, dehydration, separation, and filtration products that meet or exceed regulations and industry standards. We help industries shift to alternative fuels by providing high-efficiency, high-performance, and low-carbon fuel solutions.

We are fortunate to have a clear general strategic direction over a 30+ year horizon, as the world mobilizes to transition to a low-carbon economy. The challenge becomes how to best position us in this rapidly evolving field, how to leverage our technological know-how, size, and flexibility to capture opportunities arising from successively emerging technologies and equipment that have a lifecycle of approximately 15 to 20 years.

To translate this long-term clarity into a series of short-term strategic priorities, we have implemented a rolling three-year plan approach. Our current three-year strategic plan is articulated around three axis:

- 
- | Offer low-carbon fuels through significant expansion of our renewable natural gas and hydrogen solutions
  - | Create a Cleantech Service Network to support the growing number of renewable natural gas and hydrogen installations
  - | Focus on profitable growth for a sustainable future

While each of the sustainability-related issues described in the following sections of this report is intrinsically connected to our ability to meet demand for our products, generate revenues, manage costs, increase profitability, and ultimately create value, two issues in particular explicitly affect current strategy execution.

**The first is climate change**, which is the overarching driver of rapidly growing demand for low-carbon energy sources. Our cleantech products enable the capturing and upgrading of biogas to high purity natural gas (methane) that can be injected into the natural gas distribution grid or used as a transportation fuel, and that produces environmentally benign by-products (organic fertilizer and animal bedding). The regulatory, technology, and market drivers represent transition opportunities that accelerate the growing demand for our products (see pages 14-16).

**The second is fuel economy and emissions in use-phase**, which speaks not only to the fact that our products help reduce our clients' emissions, but they offer several competitive advantages, as they are more fuel efficient, consume no water, and have significantly less impact on the environment than competing technologies (see page 20).



For more information about our overall business strategy, please refer to Xebec's [2019 Annual Information Form](#)



## ECONOMIC CONTRIBUTION

Xebec's goal is to profitably grow revenues and earnings, and build a sustainable business that will drive long-term shareholder value. Over the years, we have invested considerable amounts in research and development to bring technologies to market that deliver cost-effective, low-impact solutions for the generation and purification of renewable natural gas and hydrogen. With the rising awareness of climate-related risks and the global mobilization to transition to a low-carbon economy, we have been experiencing significant growth in both revenues and profits in recent years.

**We expect to continue to benefit from favourable tailwinds in the coming years:**



The recognition of climate change as a global systemic risk, driving a transition from fossil energy sources towards renewable, zero-carbon energy



Continued build-out of clean natural gas refueling infrastructure in the U.S., Canada, and Europe combined with rapidly increasing demand for renewable natural gas as a transportation fuel



Implementation of low carbon fuel standards driving demand for renewable natural gas and hydrogen as a low carbon transportation fuel and establishment of renewable natural gas assets



Increasing demand for small scale decentralized hydrogen production and purification solutions for fuel cell applications in transport and industrial applications



Hydrogen purification technologies poised to experience robust growth in the U.S., China, Japan, Canada, Germany, and India in refining and electronics industries



Increasing demand for compressed air and gas equipment across the food & beverage, medical and pharmaceutical industries that can deliver cleaner, purer, oil-free, dry and sterile compressed air, combined with the trend in reshoring industries to North America



In the broader context of sustainability, our financial performance also measures the economic value we generate and distribute through our activities.

#### ECONOMIC VALUE GENERATED AND DISTRIBUTED (IN MILLIONS OF DOLLARS)

	2019	2018	delta
Revenues	\$49.3M	\$20.2M	+144%
(less)			
Operating costs	\$38.6M	\$17.9M	+116%
Employee wages and benefits	\$6.7M	\$3.9M	+72%
Payments to providers of capital (interest, dividends)	\$1.6M	\$1.3M	+23%
Payments to governments (taxes, penalties)	\$0.4M	—	—
Community investments (including donations)	—	—	—
(equals)			
Economic value retained	\$2.0M	(\$2.9M)	—

## Profitable growth is a key driver to attract and retain great talent

Profitable growth for a sustainable future is not only a key motivator for the investment community but the key driver to attract and retain great talent. Xebec recognizes that successful companies need engaged, motivated and skilled employees who are committed to their work, their environment, and their colleagues. Employees feel engaged when they receive positive interpersonal and workplace support. They feel motivated when they know they are making a difference. They feel valued when they see their work appropriately compensated.



For more information about our consolidated financial performance, please refer to Xebec's [2019 Management's Discussion and Analysis and Consolidated Financial Statements](#)





## 1. CLIMATE CHANGE

### Why it matters

The issue of climate change is core to Xebec's mission of helping our world transition to a low-carbon future by accelerating the production of renewable gases. Our business strategy is to meet the growing market demand for energy efficient and low-emission sources of energy, to service new customers and maintain strong growth in revenues and operating profitability. Our operating and financial performance are predicated on leveraging policy and technology developments, such as low carbon or renewable fuel standards that facilitate the development of low-carbon solutions, such as renewable natural gas and hydrogen. We intend to be a facilitator in the rapidly evolving global energy transition space.

For example, Xebec's renewable gas purification systems treat organic waste from farms and municipalities by converting it to high purity renewable gases (methane and hydrogen) and environmentally benign by-products (organic fertilizer and animal bedding). In so doing, our systems reduce overall greenhouse gas emissions (as well as soil and water pollution), because organic waste conversion into renewable gases is carbon neutral, and sometimes even carbon negative. The combustion of these renewable gases can displace higher-emission fossil fuels in transportation and industrial applications, such as glass, steel, and other manufacturing sectors.



For more information about the market drivers for our cleantech products, please refer to our [2019 Annual Information Form](#)



## How we manage it

The nature of our business is such that the global transition to a low carbon economy is more likely to represent business opportunities than risks for Xebec. Although we have intuitively been navigating these rapidly changing risks and opportunities over the years, we have recently undertaken a formal strategic review to assess the political, economic, social, technological, environmental, and legal factors affecting – or likely to affect – our cleantech business, which we expect to complete by the Fall of 2020. The output will serve to better articulate how we address the regulatory, legal, technology, and demand drivers we face, as well as any impediments.

We continue to leverage our technology and we are ramping up development activities to ensure that we offer products that consume as little energy to operate as possible and have the longest service and maintenance intervals possible, and thereby deliver superior life cycle costs and environmental benefits.

We are active members of several renewable gas industry associations and collaborate in efforts to promote the cleantech industry (see page 7).

We also seek to expand the market itself by gearing up to deploy several renewable gas production facilities that can help meet current provincial requirements but also future requirements under proposed federal legislation (Canadian Clean Fuel Standard), for which our recent partnership announcement with the Fonds de solidarité FTQ marks the first step (see page 16).

### REVENUE BREAKDOWN BY BUSINESS ACTIVITY

	2019	2018	Delta
Cleantech Systems <sup>(1)</sup>	\$37.8M	\$14.0M	+170%
Industrial Service and Support <sup>(2)</sup>	\$11.5M	\$6.2M	+85%
RNG Infrastructure <sup>(3)</sup>	—	—	
Total	\$49.3M	\$20.2M	+144%

1. Cleantech Systems: end-to-end systems for gas purification and the production of renewable natural gases such as renewable natural gas and renewable hydrogen
2. Industrial Service and Support: air and gas treatment products for industrial applications
3. RNG Infrastructure: build, own, and operate renewable gas projects



## Creation of the GNR Québec Capital L.P.

In June 2020, Xebec and the Fonds de solidarité FTQ announced the creation of the GNR Québec Capital L.P. investment fund. First of its kind in Quebec, this new investment vehicle aims to increase renewable natural gas production in the province, in particular through the creation of facilities that treat organic waste from the agricultural and municipal sectors. This initiative supports the just transition to a low-carbon economy by creating jobs and supporting local economies with additional revenue streams for farmers, municipalities, and industry.

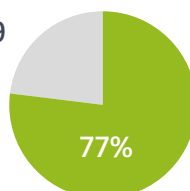


For more information about this announcement, please refer to the [June 1, 2020 press release](#)

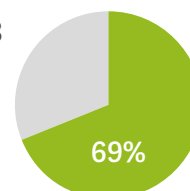
## How we measure performance

Proportion of revenues by business activity

2019



2018



In 2019, revenues from **Cleantech Systems** represented 77% of total revenues, up from 69% in 2018. These revenues grew 170%, because of the strong market demand for renewable natural gas solutions to replace fossil fuels, driven in part by the adoption of new regulation and support schemes for renewable natural gas and hydrogen, as well as Xebec's increased market penetration through customer awareness of its technology and higher dollar value of contracts. Revenues for **Industrial Service and Support** grew 85% in 2019, due mainly to the contributions and synergies derived from acquisitions.

We do not currently measure our greenhouse gas emissions. This is something we intend to implement in the near term, starting with our Scope 1 and 2 emissions. As mentioned below (page 20) in reference to the issue of fuel economy and emissions in use-phase of our products, we do not measure emissions or avoided emissions of our products (part of our Scope 3 emissions) as these depend on our customers' own energy sources. In the future, we plan to look at quantifying our clients' emission reductions from using our equipment.





## 2. ENERGY MANAGEMENT

### Why it matters

Energy is an input in industrial products manufacturing, stemming mainly from electricity consumption and fuel purchases, so managing how our energy is sourced and how much we consume is part of controlling costs as well as any potential impacts from regulations or taxes on fossil fuels.

At Xebec, energy management is part of an overarching preoccupation with efficient use of resources and materials. However, it is given a relatively low priority because it represents only a small portion of operating costs. Another mitigating factor is that our main manufacturing facility is located in Quebec, Canada, where electricity is sourced almost exclusively from renewable sources (mostly large hydro).

### How we manage it

Our manufacturing activities are not particularly energy intensive, with energy consumed mainly for heating, ventilation, and lighting, as well the pressure vessel welding performed at our Blainville plant to assemble our units using components procured from independent suppliers. In China, pressure vessel welding is outsourced to local firms.

Incremental energy efficiency improvements are made on an ongoing basis from new equipment purchases and building renovations. A notable example is the conversion of all lighting to DEL at the Blainville plant, which has resulted not only in lower energy costs, but also better work conditions and less safety risks for employees.

More recently, we began to assess the possibility of using renewable natural gas to displace fossil natural gas currently being used as an energy source for our heating and ventilation needs at our Quebec facility. Over time, we plan to assess the energy sources for all our facilities, including those added through acquisitions.

### How we measure performance

We do not measure our total energy consumption, nor the proportion of this consumption that comes from renewable energy currently. This is something we intend to implement in the near term.



### 3. EMPLOYEE HEALTH & SAFETY

#### Why it matters

Approximately 20% of employees work in manufacturing, at either our Blainville or Shanghai facilities. They face health and safety risks from exposure to machinery and equipment. This is especially the case for welding activities and manipulating very large and heavy metal components. Employee safety is a priority at Xebec, and we continuously conduct health and safety meetings and improvement actions. Besides the personal well-being of our employees, safety is important to address because it helps optimize productivity, ensure that we fulfill our contracts in a timely manner, maximize productivity, and minimize unexpected costs. As the Company grows and its production levels increase, more and longer shifts are increasing the risks of injury.

#### How we manage it

The Company's Health and Safety Committee, comprised of an equal number of plant workers and management, oversees policies and procedures and meets monthly to address health and safety issues on an ongoing basis. A sub-committee analyses each incident that occurs to identify and implement preventive measures.

Xebec is a member of a prevention mutual, which groups businesses together based on their workplace health and safety records to help them benefit from improved labour standards contribution rates (namely to the CNESST or the labour standards, pay equity and workplace health and safety board). Through this group, the Company also benefits from services such as advice, training, as well as prevention and injury management and support.



Recognizing that prevention is an important component of health and safety practices, we are in the process of rolling out an employee assistance program to complement our benefits package that will provide free and confidential access to medical and psychological professionals to all employees and their families.

Developing a culture of safety – or corporate culture in general – is proving challenging in the face the Company’s very rapid expansion over the last few years, during which time the number of employees has more than tripled, our product offering has expanded, and new processes and systems need to be implemented. Recent additions to the management team, including the Vice President, Operations, the Information Systems and Quality Director, and the Human Resources Director bring a strong background in health and safety. One aspect of our corporate culture that remains unchanged is the genuine respect and appreciation for employees that senior management demonstrates, through regular walkabouts, impromptu exchanges, regular town halls, and formal recognition.

We know that we must do more to formalize our health and safety practices by implementing protocols, forming better habits through culture and training, and measuring performance through specific metrics. To this end we have asked our prevention mutual to conduct a safety risk audit, and hope to have it completed before the end of 2020. Over the medium term, we have set a goal to achieve compliance with American Occupational Safety and Health Administration (OSHA) standards.

## How we measure performance

Injuries are documented and reported to senior management on a weekly basis, and any major incident is reported immediately. In 2019, we recorded a total of six incidents. However, we do not currently measure our total recordable injury rate or our near miss frequency rate. Implementing processes to achieve compliance with the OSHA standards will enable us to provide such measures in the future.



### **Mental health support in the wake of the coronavirus crisis**

In the wake of the recent coronavirus crisis, during which office staff worked remotely while plant employees continued to work onsite, employees were given an extra “mental health” day of paid vacation.

## 4. FUEL ECONOMY & EMISSIONS IN USE-PHASE

### Why it matters

Fuel economy and emissions in use-phase are important characteristics of our cleantech products, to meet customers' evolving needs and cost imperatives. They serve as important competitive differentiators and allow us not only to capture the growing demand for gas purification and renewable gas production systems, but also to capture a growing share of the market. Given the relatively high fixed cost nature of our business, higher growth and revenues can quickly translate to higher profitability. Energy efficiency is an important consideration for customers and is often included in requests for proposals because energy or electricity costs represent a significant portion of their operating costs. Lower energy costs over the 15 to 20-year lifespan of the equipment can result in significant savings. Lower energy may also mean lower emissions depending on the fuel source, so our products also help our customers address regulatory risks associated with more stringent emissions standards or carbon pricing schemes.

### How we manage it

We believe our gas purification systems are the most energy efficient on the market. Energy is consumed by the compressor in processing biogas to upgrade it to renewable natural gas. We measure our energy consumption at 0.16 kWh per cubic meter of biogas processed, compared with an estimated 0.30-0.35 kWh per cubic meter for competing technologies, representing approximately 35% to 40% less energy consumption. Our cleantech control systems are designed to measure and report energy efficiency on a daily basis.

The efficiency of our systems is measured by the gas recovery rate, which we have been able to increase through research investments and currently guarantee to clients in the 98.5% to 99% range.

Our systems also provide additional environmental and cost benefits in that they require no water or chemical consumption and generate less solid waste than other technologies.

To maintain our competitive advantage, we must remain vigilant and deploy efforts to continuously improve our technology and solutions in the rapidly evolving renewable natural gas and hydrogen fields. As mentioned above, we continue to leverage our technology, and we are ramping up development activities in gas purification and recovery to ensure that we offer the highest efficiency and lowest emission products. For example, we are exploring technology that would allow for the recovery off-heat or water from gas purification systems, leading to zero-emission systems.

### How we measure performance

While we closely track the energy consumption rates of our cleantech systems as mentioned above, we do not measure their fuel efficiency nor the emissions they generate in-use, either individually or on a sales-weighted basis.

We do facilitate these calculations for each customer, which will depend on their choice of fuels and how they process gases in the exhaust stream (vent, flare, or thermal oxidization). Customers are responsible for making sure they comply with air emissions permits.



## 5. MATERIALS SOURCING

### Why it matters

While we design all our products, our manufacturing activities involve mainly the assembly of gas purification units using components and materials procured from third parties. In this regard, we are dependent on a few suppliers and if they become unable or unwilling to provide us with enough materials and components that meet our quality, quantity, cost, and delivery requirements, we may be unable to obtain suitable substitute materials and components from other suppliers, which would adversely affect our revenue generation and profit margins.

### How we manage it

We are working to strengthen our procurement practices in several ways. We have hired an external consultant to develop a global procurement policy and strategy, which we expect to have completed by the end of 2020. This strategy will include formal supplier audits and periodic vetting processes, as well as dual sourcing of materials and components. Currently, approximately 90% of these materials are dual sourced.

For the remaining 10% that are single sourced, supply is being constrained by consolidation among manufacturers. While not affecting availability of the materials, it is putting upward pressure on prices. This has not affected our revenues or margins yet, as these materials represent less than 10% of selling price; however, they could lead to higher costs for our customers when they will need to replace these materials as part of routine maintenance of their units.

As technologies continue to evolve, we will incorporate sourcing considerations in the design of new products, either choosing specific materials for which multiple sources can be secured or working with key suppliers to custom design materials that meet our specific needs and for which we would secure exclusive long-term supply agreements.

## 6. REMANUFACTURING DESIGN AND SERVICES

### Why it matters

The remanufacturing of equipment and components may offer opportunities to reduce costs by reducing raw material purchases or strengthen customer relationships by better meeting their need for parts, as well as helping them divert resources from disposal or recycling channels.

### How we manage it

Currently, Xebec does not actively integrate remanufacturing into the design and servicing of our products.

Refurbishing opportunities are limited to a few specific components, as with use the materials in gas purification units become too fatigued for core systems to be reclaimed and remanufactured. The Company does refurbish certain compressor parts and returns them to the customer as spare parts, which are held to reduce downtime in case of repair or maintenance. In the medium term, we will be looking into opportunities to increase the reconditioning of components, such as compressors, vacuum pumps, and blowers as part of our after-sales service. While customer demand for refurbished equipment is not significant presently, we recognize this is likely to change in the future.

### How we measure performance

We do not record revenues from remanufactured products and remanufacturing services currently, as they represent a negligible proportion of revenues.





## SASB INDEX

### DISCLOSURE TOPICS AND ACCOUNTING METRICS FOR THE RESOURCE TRANSFORMATION – INDUSTRIAL MACHINERY & GOOD INDUSTRY

CRITERIA ID NUMBER	DESCRIPTION OF METRIC	ANSWER / LOCATION	FULL OR PARTIAL
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#### ENERGY MANAGEMENT

RT-IG-130a.1	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Page 17	Partial
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#### EMPLOYEE HEALTH & SAFETY

RT-IG-320a.1	(1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR)	Pages 18-19 Xebec has never had a fatality.	Partial
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#### FUEL ECONOMY & EMISSIONS IN USE-PHASE

RT-IG-410a.1	Sales-weighted fleet fuel efficiency for medium- and heavy-duty vehicles	Not applicable – Xebec does not manufacture heavy-duty vehicles	n/a
RT-IG-410a.2	Sales-weighted fuel efficiency for non-road equipment	Page 20	Partial
RT-IG-410a.3	Sales-weighted fuel efficiency for stationary generators	Not applicable – Xebec does not manufacture stationary generators	n/a
RT-IG-410a.4	Sales-weighted emissions of: (1) nitrogen oxides (NOx) and (2) particulate matter (PM) for: (a) marine diesel engines, (b) locomotive diesel engines, (c) on-road medium- and heavy-duty engines, and (d) other non-road diesel engines	Not applicable – Xebec does not manufacture engines	n/a

#### MATERIALS SOURCING

RT-IG-440a.1	Description of the management of risks associated with the use of critical materials	Page 21	Full
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#### REMANUFACTURING DESIGN & SERVICES

RT-IG-440b.1	Revenue from remanufactured products and remanufacturing services	Page 22	Partial
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#### ASSOCIATED ACTIVITY METRICS

CRITERIA ID NUMBER	DESCRIPTION OF METRIC	ANSWER / LOCATION
RT-IG-000.A	Number of units produced by product category	n/a
RT-IG-000.B	Number of employees	Page 6

## SASB Index [continued]

DISCLOSURE TOPICS AND ACCOUNTING METRICS FOR ADDITIONAL ISSUES  
THAT THE COMPANY CONSIDERS MATERIAL TO ITS BUSINESS

CRITERIA ID NUMBER	DESCRIPTION OF METRIC	ANSWER / LOCATION	FULL OR PARTIAL
<b>CLIMATE CHANGE</b>			
Not applicable	Scope 1, 2, and 3 emissions according to the GHG Protocol	Pages 14-15-16	Partial
Not applicable	Percentage of revenues from low-carbon alternatives or «green» products	Pages 14-15-16	Partial
Not applicable	Percentage of R&D dedicated to low-carbon or “green” products	100% of the Company’s research and development expenditures are dedicated to renewable gas production	Full

ASSOCIATED ACTIVITY METRICS

CRITERIA ID NUMBER	DESCRIPTION OF METRIC	ANSWER / LOCATION
N/A	Revenues	Page 13



A young girl with brown hair tied in a ponytail with a red bow, wearing a red jacket, is shown in profile from the chest up. She is holding a bundle of wheat stalks in her right hand. The background is a clear blue sky with a hint of a landscape below. The top of the page has a blue header with a white dotted pattern on the left and the 'xebec' logo on the right.

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