

Annual Report

Cover Page

Name of issuer:

Airthium Inc.

Legal status of issuer:

Form: Corporation

Jurisdiction of Incorporation/Organization: DE

Date of organization: 5/17/2017

Physical address of issuer:

14425 Falcon Head Blvd
BUILDING E - Suite 100
Austin TX 78738

Website of issuer:

<https://www.airthium.com>

Name of intermediary through which the offering will be conducted:

Wefunder Portal LLC

CIK number of intermediary:

0001670254

SEC file number of intermediary:

007-00033

CRD number, if applicable, of intermediary:

283503

Current number of employees:

13

	Most recent fiscal year-end:	Prior fiscal year-end:
Total Assets:	\$5,026,816.00	\$2,167,296.00
Cash & Cash Equivalents:	\$3,170,156.00	\$309,071.00
Accounts Receivable:	\$0.00	\$0.00
Short-term Debt:	\$317,121.00	\$296,316.00
Long-term Debt:	\$7,828,024.00	\$3,820,122.00
Revenues/Sales:	\$374,275.00	\$365,549.00
Cost of Goods Sold:	\$0.00	\$0.00
Taxes Paid:	(\$321,933.00)	(\$336,103.00)
Net Income:	(\$1,223,955.00)	(\$830,966.00)

Select the jurisdictions in which the issuer intends to offer the securities:

AL, AK, AZ, AR, CA, CO, CT, DE, DC, FL, GA, HI, ID, IL, IN, IA, KS, KY, LA, ME, MD, MA, MI, MN, MS, MO, MT, NE, NV, NH, NJ, NM, NY, NC, ND, OH, OK, OR, PA, RI, SC, SD, TN, TX, UT, VT, VA, WA, WV, WI, WY, B5, GU, PR, VI, 1V

Offering Statement

Respond to each question in each paragraph of this part. Set forth each question and any notes, but not any instructions thereto, in their entirety. If disclosure in response to any question is responsive to one or more other questions, it is not necessary to repeat the disclosure. If a question or series of questions is inapplicable or the response is available elsewhere in the Form, indicate that it is inapplicable or available elsewhere in the Form.

is inapplicable or the response is available elsewhere in the form, either state that it is inapplicable, include a cross-reference to the responsive disclosure, or omit the question or series of questions.

Be very careful and precise in answering all questions. Give full and complete answers so that they are not misleading under the circumstances involved. Do not discuss any future performance or other anticipated event unless you have a reasonable basis to believe that it will actually occur within the foreseeable future. If any answer requiring significant information is materially inaccurate, incomplete or misleading, the Company, its management and principal shareholders may be liable to investors based on that information.

THE COMPANY

1. Name of issuer:

Airthium Inc.

3. Has the issuer or any of its predecessors previously failed to comply with the ongoing reporting requirements of Rule 202 of Regulation Crowdfunding?

☐ Yes ☒ No

DIRECTORS OF THE COMPANY

4. Provide the following information about each director (and any persons occupying a similar status or performing a similar function) of the issuer.

Director	Principal Occupation	Main Employer	Year Joined as Director
Franck Lahaye	COO	Airthium	2017
Andreï Klochko	CEO	Airthium	2017

For three years of business experience, refer to [Appendix D: Director & Officer Work History](#).

OFFICERS OF THE COMPANY

5. Provide the following information about each officer (and any persons occupying a similar status or performing a similar function) of the issuer.

Officer	Positions Held	Year Joined
Franck Lahaye	COO	2017
Andreï Klochko	CFO	2017
Andreï Klochko	CEO	2017
Andreï Klochko	President	2017
Andreï Klochko	Treasurer	2017
Andreï Klochko	Secretary	2017

For three years of business experience, refer to [Appendix D: Director & Officer Work History](#).

INSTRUCTION TO QUESTION 5: For purposes of this Question 5, the term officer means a president, vice president, secretary, treasurer or principal financial officer, comptroller or principal accounting officer, and any person that routinely performing similar functions.

PRINCIPAL SECURITY HOLDERS

6. Provide the name and ownership level of each person, as of the most recent practicable date, who is the beneficial owner of 20 percent or more of the issuer's outstanding voting equity securities, calculated on the basis of voting power.

Name of Holder	No. and Class of Securities Now Held	% of Voting Power Prior to Offering
Andreï Klochko	5742400.0 Common stock	67.4
Franck Lahaye	1920000.0 Common stock	22.6

INSTRUCTION TO QUESTION 6: The above information must be provided as of a date that is no more than 120 days prior to the date of filing of this offering statement.

To calculate total voting power, include all securities for which the person directly or indirectly has or shares the voting power, which includes the power to vote or to direct the voting of such securities. If the person has the right to acquire voting power of such securities within 60 days, including through the exercise of any option, warrant or right, the conversion of a security, or other arrangement, or if securities are held by a member of the family, through corporations or partnerships, or otherwise in a manner that would allow a person to direct or control the voting of the securities (or share in such direction or control — as, for example, a co-trustee) they should be included as being "beneficially owned." You should include an explanation of these circumstances in a footnote to the "Number of and Class of Securities Now Held." To calculate outstanding voting equity securities, assume all outstanding options are exercised and all outstanding convertible securities converted.

BUSINESS AND ANTICIPATED BUSINESS PLAN

7. Describe in detail the business of the issuer and the anticipated business plan of the issuer.

For a description of our business and our business plan, please refer to the attached **Appendix A, Business Description & Plan**

INSTRUCTION TO QUESTION 7: Wefunder will provide your company's Wefunder profile as an appendix (Appendix A) to the Form C in PDF format. The submission will include all Q&A items and "read more" links in an un-collapsed format. All videos will be transcribed.

This means that any information provided in your Wefunder profile will be provided to the SEC in response to this question. As a result, your company will be potentially liable for misstatements and omissions in your profile under the Securities Act of 1933, which requires you to provide material information related to your business and anticipated business plan. Please review your Wefunder profile carefully to ensure it provides all material information, is not false or misleading, and does not omit any information that would cause the information included to be false or misleading.

RISK FACTORS

The U.S. Securities and Exchange Commission does not pass upon the merits of any securities offered or the terms of the offering, nor does it pass upon the accuracy or completeness of any offering document or literature.

These securities are offered under an exemption from registration; however, the U.S. Securities and Exchange Commission has not made an independent determination that these securities are exempt from registration.

8. Discuss the material factors that make an investment in the issuer speculative or risky:

An investment in our shares involves a high degree of risk and many uncertainties.

You should carefully consider the specific factors listed below, together with the other information included in this offering circular, before purchasing our shares in this offering. If one or more of the possibilities described as risks below actually occur, our operating results and financial condition would likely suffer and the trading price, if any, of our shares could fall, causing you to lose some or all of your investment. The following is a description of what we consider the key challenges and material risks to our business and an investment in our securities.

Our limited operating history makes evaluating the business and future prospects difficult, and may increase the risk of your investment.

We were incorporated in May 2017 and we have not yet begun producing or delivering any hardware product. To date, we have no revenues beyond a small pilot contract for our software product. The Company expects to incur significant operating losses in the near future until the Company's products achieve some measure of market acceptance and the Company's revenues exceed its expenses. The Company's business does not have an established record of profitability and the Company may never be profitable at all. In addition, the Company expects its operating expenses to increase over time as the Company expands its operations.

Our hardware products, including energy storage systems and heat pumps, require significant investment, most notably in research and development, prior to commercial launch, and may never be successfully developed or commercially successful. There can be no assurance that the Company will successfully implement its business, which could have a material adverse effect on its business. The Company cannot guarantee that it will achieve its stated business objectives or achieve positive or competitive results from its operations.

We face significant barriers as we attempt to develop, test, industrialize, and eventually manufacture our energy storage systems and other hardware products.

We do not yet have any prototypes beyond a handful of lab-scale test benches, and do not have a final design, a manufacturing facility or manufacturing processes. Our seasonal energy storage system and other hardware products, including heat pumps, have been designed in-house so far and will be the first of their kind. Therefore, there is no guarantee that our seasonal energy storage system or other hardware products including heat pumps, will ever work as conceived, or that any of the company's projections will be achieved.

The energy industry has traditionally been characterized by significant barriers to entry, including large capital requirements, investment costs connected to research and development, designing and manufacturing systems, long lead times to bring systems to market from the concept and design stage, the need for specialized scientific, technical, industrial, design and development expertise, regulatory requirements, establishing an extensive track record of reliability (we're talking years), and establishing sales and distribution channels as well as a global service and maintenance network. We must successfully overcome these and other manufacturing and legal barriers to be successful.

We will require additional financing.

The research and development, industrialization, manufacture, sale and servicing of stationary energy storage systems and industrial heat pumps is a capital-intensive business. As an early-stage venture, we are dependent upon this Offering and other outside financing in order to implement our business plan and eventually complete development and commercial implementation of our energy storage systems, industrial heat pumps, and other hardware products, if any. If we do not raise sufficient capital pursuant to this Offering and other outside financing, we may have to delay or modify our business plan. There can be no assurance that any such delay or modification would not have a material adverse effect on our Company.

Even if we successfully raise up to the maximum funding target on this Offering, we estimate that we will at least need to raise an additional \$100,000,000 plus to reach the commercial deployment stage of our energy storage systems, industrial heat pumps, and other hardware products, if any, beyond one-off pilot projects. We will need to raise additional funds through the issuance of equity, equity-related, or debt securities or through obtaining credit from governments or financial institutions. We will pursue the most advantageous source(s) of funding for the Company and its shareholders at the most attractive terms. Nevertheless, if available, such financing may result in the imposition of restrictions on the Company's future borrowings and operating policies and dilute the ownership of investors and management.

This capital will be necessary to fund research and development, testing, industrialization, deployment of pilot projects, and eventually, building a complete manufacturing facility with the help of strategic industrial partners to bring the unit costs of our hardware products low enough to meet market demand. Should any of the steps leading to this late development stage fail, our company might be forced to file for bankruptcy. Furthermore, we cannot assure you that we will be able to raise additional funds when needed, or that it will be available upon terms that are acceptable to our shareholders.

The emergence of new, competing technologies might prevent our products from ever reaching the market.

Significant developments in alternative technologies could severely impair our ability to reach the market with a competitive product, including energy storage and industrial heat pumps, and generate any kind of return on our business.

On the energy storage side, such technologies include, yet are not limited to, ammonia-fired two-stroke internal combustion engines, ammonia fuel cells, CO₂ capture, CO₂ electrolysis, other CO₂ recycling technologies, hydrogen storage solutions other than liquid ammonia, fusion energy, next-generation nuclear fission energy, flow batteries including those optimized for very long duration storage, gravity-based storage of liquids and solids, geothermal power, electrochemical batteries including lithium-ion batteries, battery recycling technologies, and more generally, any energy storage technology with a duration from a few hours to a few years or more, or enabling technologies related to energy storage.

On the industrial heat pump side, these technologies include, yet are not limited to, mechanical vapor recompression (MVR), Brayton-cycle-based systems, competing Stirling engine technologies, thermo-acoustic engines, other competing high temperature heat pump technologies, solar thermal technologies, biofuels, industrial combined heat and power, including coal, gas, nuclear, and other fuels, with or without carbon capture and storage or utilization, high temperature resistive and/or solar heat storage, low-cost resistive heating, and more generally, any technology allowing to supply high temperature heat demanded by industrial processes at conditions that are favorable to the process owner and/or operator.

If any such technology enables the development of a better energy storage and/or heat pump system, be it lower cost, higher efficiency, or more suited to the needs of our target customers, then the development of those alternative technologies may materially and adversely affect our business and prospects in ways that we do not currently anticipate. Should products powered by those alternative technologies reach the market, our products may not be able to compete, and in such a scenario, we might be forced to file for bankruptcy.

We will need to rely on third parties to reach market and execute on our business plan.

For us to reach the market with competitive energy storage products, we will need to rely on partnerships and agreements with entities outside of our direct control. Those entities include, but are not limited to, suppliers, vendors, manufacturers, strategic corporate partners, energy project developers, owners, and operators, utilities, regulatory agencies, contractors, engineering firms,

research laboratories, and more generally any entity that the management of the company determines in good faith to be able to help our product reach the market in the best conditions for our long-term commercial development.

Should any of those partnerships or agreements fail to be obtained or honored by any third party, or should any third party deliver on those partnerships or agreements on a quality level that would significantly decrease the value of our products to customers or increase their manufacturing or servicing costs, such events might impair our ability to reach the market and stay in operation. Eventually, such events could force our company to file for bankruptcy.

The Company relies on its present and future intellectual property rights to have a competitive advantage on the market.

We believe Airthium's present and future intellectual property rights are and will be valuable, and any inability to protect them could reduce the value of Airthium's products, services and brand. We have realized a patentability study, with the help of a French IP consulting firm, in January 2020. The study shows there are no active patents covering Airthium's core technology. As a result, we should be able to protect our core technology using patents in many countries where we could sell significant amounts of energy storage systems. It is not guaranteed, however, that we will indeed be granted patents on any part of our technology, in any country.

Furthermore, our present and future intellectual property rights may not be sufficiently broad or otherwise may not provide us a significant competitive advantage. In addition, the steps that we have taken and will likely take in the future to maintain and protect our intellectual property may not prevent it from being challenged, invalidated, circumvented or designed-around, particularly in countries where intellectual property rights are not highly developed or protected. In some circumstances, enforcement may not be available to us because an infringer has a dominant intellectual property position or for other business reasons. Any failure by the Company to obtain or maintain intellectual property rights that convey competitive advantage, adequately protect our intellectual property or detect or prevent circumvention or unauthorized use of such property, could adversely impact our competitive position and results of operations.

We also rely on nondisclosure and non-compete agreements with vendors, consultants and other parties to protect, in part, trade secrets and other proprietary rights. There can be no assurance that these agreements will adequately protect our trade secrets and other proprietary rights and will not be breached, that we will have adequate remedies for any breach, that others will not independently develop substantially equivalent proprietary information or that third parties will not otherwise gain access to our trade secrets or other proprietary rights. As we expand our business, protecting our intellectual property will become increasingly important. The protective steps we have taken and will take may be inadequate to deter our competitors from using our proprietary information.

In order to protect or enforce our intellectual property rights, we may be required to initiate litigation against third parties, such as infringement lawsuits. Also, these third parties may assert claims against us with or without provocation. These lawsuits could be expensive, take significant time and could divert management's attention from other business concerns. The law relating to the scope and validity of claims in the technology field in which we operate is still evolving and, consequently, intellectual property positions in our industry are generally uncertain. We cannot assure you that we will prevail in any of these potential suits or that the damages or other remedies awarded, if any, would be commercially valuable.

Our business is vulnerable to natural and man-made disasters.

Airthium's business is subject to the risks of natural disasters, including, yet not limited to, earthquakes, landslides, floods, fires, storms, tornadoes, and lightning. It is also subject to outside man-made faults and disasters, including, yet not limited to, power loss, rolling blackouts, telecommunication failures, terrorist attacks, cyber-attacks, computer viruses, computer denial-of-service attacks, human error, and hardware or software defects or malfunctions (including defects or malfunctions of components of Airthium's systems that are supplied by third party service providers). Such faults and disasters, and similar events or disruptions, will collectively be called "Negative Events".

Negative Events could result, directly or indirectly, in system failures, damages, accidental injury or even loss of human life (collectively, the Negative Consequences) that could materially and adversely affect our business and prospects in ways that we do not currently anticipate. Although steps will be taken to design Airthium's systems in a way that should reduce Negative

Consequences in the occurrence of one or more Negative Events, our systems, both hardware and software, will remain vulnerable to Negative Events. Airthium does not carry business interruption and liability insurance sufficient to compensate it for losses that may result from interruptions in Airthium's service as a result of Negative Consequences. As a result, Negative Events could, directly or indirectly, harm Airthium's business, financial condition and results of operations.

Any forward-looking projections provided in this Offering may prove to be significantly inaccurate.

Any projections, either regarding our future operational and financial performance or any outside factor likely to impact our business, collectively called "Management's Projections", provided to you in this Offering, are forward looking statements and may prove to be significantly incorrect.

Management's Projections, especially those regarding future revenues, expenses and the outlook for the business are based on good faith estimates but are inherently unreliable. Factors such as adverse decisions, future competition, greater diligence costs, increased development or marketing expenses, or any other event in relation to the risks detailed in this Offering may affect the Company's future revenue streams and profitability.

For these reasons, you should not rely upon the Management's Projections, including those of future performance, in making your investment decision as the management's assumptions underlying the Management's Projections (and any limitations on the assumptions) may prove to be significantly inaccurate.

Security breaches and other disruptions could compromise our information and expose us to liability, which would cause our business and reputation to suffer.

We collect and store sensitive data, including intellectual property, our proprietary business information and that of our customers, vendors and business partners, and personally identifiable information of our customers and employees, in our data centers and on our networks. We also expect to come into possession of energy usage data, from companies, cities, utilities, groups of users or even individuals, which represents sensitive data.

The secure processing, maintenance and transmission of this information is critical to our operations and business strategy. Like others in our industry, we continue to face advanced and persistent attacks on our information infrastructure where we manage and store various proprietary information and sensitive/confidential data relating to our operations. These attacks may include sophisticated malware (viruses, worms, and other malicious software programs) and phishing emails that attack our products or otherwise exploit any security vulnerabilities. Additionally, sophisticated software and applications that we produce or procure from third-parties may contain defects in design or manufacture, including "bugs" and other problems that could unexpectedly interfere with the operation of the information infrastructure.

Despite our security measures, our information technology and infrastructure may be vulnerable to attacks by hackers or breached due to employee error, malfeasance or other disruptions. Any such breach could compromise our networks and the information stored there could be accessed, publicly disclosed, lost or stolen. Any such access, disclosure or other loss of information could result in legal claims or proceedings, liability under laws that protect the privacy of personal information, and regulatory penalties. In addition, any such access, disclosure or other loss of information could disrupt our operations and the products and services we provide to customers, damage our reputation, and cause a loss of confidence in our products and services, which could adversely affect our revenues and competitive position.

If any such event shall occur, we could also be required to spend significant financial and other resources to remedy the damage caused by a security breach or to repair or replace networks, IT systems, and any other equipment damaged as a result of these events. The trend toward public notification of such incidents could exacerbate the associated harm to our business operations or financial condition.

Our business may be negatively affected by standards, regulations, and the associated procedures.

Our energy storage systems will need to comply with several regulatory enforced standards and national, state and local regulations, in many countries, regarding safety, emissions control, noise control, and environmental impact, among other constraints. For example, our systems are likely to require handling of large quantities of anhydrous ammonia, as well as molten sodium and potassium nitrate salts, and pressurized gases, in order to function properly. The purchasing, production, handling and disposal of those substances and others we may

eventually use are regulated by stringent standards in most countries. Compliance with all of these requirements may delay our production launch, thereby adversely affecting our business and financial condition.

Furthermore, should we reach the commercial deployment phase, the projects in which Airthium's products will be selected to participate (called "Airthium's Projects") may not materialize in a timely manner or at all. Customers and projects typically undertake a significant development process that can result in a lengthy sales cycle. In addition, they require land use permits, including environmental review of impacts on wildlife, grid connection and right of way permits, and Power Purchase Agreements that are outside of the project team's ability to control. Government decisions at the local, state and national level can affect the ability for these deeded project milestones to be achieved.

Airthium's Projects might face unanticipated changes or delays that could negatively impact the ability of these projects to be able to buy Airthium's energy storage systems. The long sales cycles may require Airthium to delay revenue recognition until certain milestones or technical or implementation requirements have been met.

The Company may fail to properly manage growth, a fact that could harm its business in the future.

The Company may experience a period of rapid growth in its headcount and operations, which may place a significant strain on the Company's management, administrative, operational and financial infrastructure. The Company's success will depend, in part, upon the ability of the Company's senior management to manage this growth effectively. To do so, the Company must continue to hire, train and manage new employees as needed. If the Company's new hires perform poorly, if the Company is unsuccessful in hiring, training, managing and integrating these new employees, or if the Company is not successful in retaining existing employees, situations referred hereto as "Negative Human Resources Events", the Company's business may be harmed.

Furthermore, the additional headcount and capital investments will increase the Company's cost base, which will make it more difficult for the Company to offset any future revenue shortfalls by offsetting expense reductions in the short term, a situation referred hereto as "Management Reactivity Constraint". To mitigate the financial and management risks caused by potential Negative Human Resources Events while taking into account the Management Reactivity Constraint, collectively called the Growth Management Risks, the Company will need to continue to improve its operational, financial and management controls, reporting systems and procedures, collectively called "Growth Management Measures". We cannot guarantee that the Company will succeed in implementing suitable Growth Management Measures in time to mitigate the financial effects of the Growth Management Risks. If the Company fails to successfully implement Growth Management Measures in a timely manner, the Company may be unable to execute its business plan, its results could suffer, and it could eventually be forced to file for bankruptcy.

Predicted operating and unit costs may be significantly inaccurate.

As a business, we depend strongly on the accuracy of assumptions regarding the unit cost of our energy storage systems, should it ever be manufactured on a large scale. Those unit costs will have to reflect research, development, industrialization, manufacturing, logistics and raw material costs, as well as insurance, financing, quality control, compliance, and various other costs. Being now at a very early stage, we and our partners do not have enough data to quantitatively and accurately predict each of those costs, and as a result, we cannot guarantee that the predicted unit costs for our energy storage systems will be met. Should the actual unit costs once industrialized prove to be too high, there is a very high possibility that our systems might not be competitive on the market, especially because of the great importance given by buyers to capital costs for infrastructure products in the energy industry. In such case, we might not be able to hit our predicted sales volumes, our financial results may suffer, and Airthium could be forced to file for bankruptcy.

In addition to this, we will incur research, development and industrialization costs, collectively called the "Development expenses", in order to reach commercial deployment, that are difficult to predict in advance. Should our predictions for those costs be inaccurate in amount or time of expense, we might fail to raise capital at various times in our development path, on terms that would be compatible with the long-term success of the project. We cannot currently guarantee that such a scenario will not happen, and that we will not be forced to file for bankruptcy as a result of such erroneous predictions of the amount or time of spending of our Development Expenses.

There is no guarantee that purchasers of our securities will ever realize a return on their investment.

There is no assurance that purchasers of our securities in this Offering will realize a return on their investment or that they will not lose their entire investment. For this reason, each purchaser should read our Form C and all associated Exhibits carefully and should consult with his/her/its own attorney and business advisor prior to making any investment decision.

In addition to the risks listed above, businesses are often subject to risks not foreseen or fully appreciated by the management. It is not possible to foresee all risks that may affect us. Moreover, we cannot predict whether we will successfully effectuate our current business plan. Each prospective Purchaser is encouraged to carefully analyze the risks and merits of an investment in the securities offered in this Offering and should take into consideration when making such analysis, among others, the Risk Factors discussed above.

Both demand for our products and cost of goods sold is subject to high volatility that can significantly impact our business.

Demand for energy storage products is driven by macro-economic and political trends that are, and will most probably remain, outside of our control. For example, energy infrastructure projects undertaken by energy utilities are most of the time constrained and even ordered or subsidized by national, state or local energy development plans that depend on public energy policy and political decisions.

Moreover, seasonal energy storage such as Airthium's main future hardware products, do not currently have a market. Seasonal storage is competing with fossil-fired power plants, large and small. It remains to be proven that customers will actually buy seasonal storage to replace or complement fossil-fired generation in the energy generation markets we intend to address. Therefore, we cannot guarantee that such a market for our products will materialize and that we will be able to generate revenue from our hardware products.

In addition, a large part of our cost of goods sold are driven by raw material costs, most notably, sodium and potassium nitrate, stainless steel, carbon steel, copper, and rare earth metals used for permanent magnet alternators. Beyond raw materials, our solution will likely incorporate products from partnering industries, most notably, hydrogen electrolysis systems and electric Haber-Bosch plants. Should any of the associated markets to those underlying goods spike, we will most probably be directly affected and will have to increase the price of our products accordingly, which may materially and adversely affect our business. As a new energy storage start-up company, we will have fewer financial resources than more established energy systems manufacturers to withstand changes in the market and disruptions in demand.

Finally, the economy as a whole enters a global recession in the aftermath of the COVID pandemic. The markets and outside factors highlighted in the above may be significantly and negatively affected by this recession.

We do not expect to pay dividends in the future. Any return on investment may be limited to the value of our common stock.

We have never paid cash dividends on our common stock and do not anticipate doing so in the foreseeable future. The payment of dividends on our common stock or convertible instruments will depend on earnings, financial condition and other business and economic factors affecting us at such time as our board of directors may consider relevant.

Our business is vulnerable to liability connected to potential accidental damages, injury, or loss of life caused by possible accidents involving our future products.

Should we reach commercial deployment stage, we will most probably build, or have partners build and install, large scale energy storage systems and industrial heat pumps. It is our belief today that our future energy storage systems will require synthesizing, burning, otherwise manipulating, and storing large amounts of anhydrous ammonia on-site. Our systems, both energy storage and heat pumps, will also most likely store and manipulate molten sodium/potassium nitrate salts, thermal oil, and compressed gases.

Even though extensive and time-tested procedures exist in the industry to address the safe commissioning, operation, and decommissioning of systems containing those five substances, procedures that we intend to apply to the fullest extent our management determines in good faith to be possible, we cannot guarantee that unintended accidents, possibly catastrophic in nature, including, yet not limited to, the explosion of ammonia storage tanks caused by fires leading to possible injury or loss of life and extensive material and environmental damages, will never occur in practice in one or more of our installations.

Should such accidents happen, the liability to Airthium could prove very large.

should such accidents happen, the liability to Airthium could prove very large, and impact our financial health, our reputation, and our future business prospects, among other corporate health indicators.

Furthermore, Airthium's insurance policies and financial resources at the time of such accidents may not be sufficient to cover the costs associated with personal injury, property damage, product liability and other types of claims brought against it. Airthium will most probably be exposed to potentially significant risks associated with product liability or other claims if Airthium's products or manufacturing activities cause personal injury or property damage, whether by product malfunctions, defects or other causes. If product liability claims are brought against Airthium in the future, any resulting adverse publicity could hurt Airthium's competitive standing and reduce revenues from sales of its products. The assertion of product liability, personal injury or property damage claims against Airthium could result in significant legal fees and monetary damages and require Airthium to make large payments. Any business disruption associated with such accidents or other catastrophic risks detailed in this Offering could result in substantial costs, lost revenues and diversion of resources. Airthium's insurance coverage will be limited for product liability and other claims against Airthium, as well as for business disruption and natural or man-made disasters. Therefore, Airthium may not have adequate insurance and financial resources to pay for its liabilities or losses from any such claim or cause.

We will need to keep rapidly improving our technology to stay competitive.

Our products will be competing against several present and future energy storage and generation solutions, as well as industrial heat solutions, developed by a very large number of companies, institutions, and individuals. One of the few ways we can build a sustainable business that can eventually grow and be profitable on a large scale, is by staying close to the edge of technological and industrial innovation. Such innovation will mostly be connected with lowering the cost, increasing reliability, making our products best suited to customer's needs, as well as spotting new customer needs we can satisfy along the way, in the form of new products or services.

Should such innovation be inaccessible for any reason to our team, we will most probably fall behind competitors, lose market share, lose revenue and margins, and eventually, our business could suffer to the point where we could be forced to file for bankruptcy. We cannot guarantee that we will be able to sustain over time the rate of innovation necessary to avoid such a scenario.

We need our present and future key personnel to reach our business goals.

The Company is dependent on its key personnel and its ability to hire or retain additional personnel, to reach its business goals and milestones. The Company relies heavily on the expertise, experience, and continued services of its management team. The loss of their services, caused by their departure from the company or by disability, illness, or for any other reason, could adversely affect the Company's ability to achieve its business plan. The Company's future success will depend on its ability to retain these key persons and its ability to attract and retain additional skilled personnel in order to grow the Company as needed to reach the business goals.

The Company's employees may voluntarily terminate their employment with the Company at any time. As a first measure to mitigate this fact, the Company implements confidentiality agreements and limited non-compete agreements (which are legal in France, where almost all the employees are located) with all its key employees. Nevertheless, competition for talented senior management, as well as middle management, engineers and scientists, is intense, and there is no assurance that the Company will be able to attract, train or retain qualified personnel in the future and the loss of personnel could have a material adverse effect on the Company.

The Company may alter the use of proceeds in this Offering without notice to you or your approval.

The Estimated Use of Proceeds described in the "Summary of the Offering" section of this Memorandum reflects the Company's anticipated use of the proceeds of this Offering. However, there is no obligation on the Company's part to use the proceeds for those purposes, and the Company will have significant discretion in applying the net proceeds of this Offering. The Company's failure to apply the proceeds of this Offering effectively could have a material adverse effect on the Company.

We operate in part using funds from a business loan and could seek more loans in the future.

We have received a 350,000€ loan from the French government on Aug. 31st, 2020. This loan funded a significant part of our projected operating costs over 2020 and the beginning of 2021. As of July 1st, 2022, it bears an interest rate of

2.25%. Its principal repayments are deferred until August 31st, 2022, meaning we currently (July 2022) only pay interest on the loan; then, the loan (principal + interest) must be repaid over 48 months, until August 31st, 2026, quarterly. Should we default on one or more of those loan repayment due dates, we might be forced to file for bankruptcy. We cannot guarantee that such an event will not happen.

Furthermore, we may have to seek other loans from financial institutions. Typical loan agreements might contain restrictive covenants which may impair the Company's operating flexibility. A default under any loan agreement could result in a charging order that would have a material adverse effect on the Company's business, results of operations or financial condition.

We may experience reliability issues or other negative press which might damage our brand and negatively impact our business.

Beyond risks associated with events that are catastrophic in nature, which are detailed in other parts of this Offering, we may experience issues with the reliability of our products and software, that would cause customers to lose faith in our brand and our products and services for an extended period of time, leading to decreasing sales which could materially and adversely affect our business (collectively, the "Negative Reputation Effects").

Such reliability issues include, yet are not limited to, short Stirling engine life, effects of mechanical fatigue, accelerated or underestimated wear of moving parts, liquid or gas leaks, underestimated or abnormal heat loss, subsystem failure, cascade failure, abnormally low engine efficiency including in transient-mode operation, freezing of heat transfer fluids, plugging or fouling of heat exchangers and regenerators, corrosion, vibration, rupture of imperfect welds, ingress of foreign substances including lubricating oil in the working fluid loops, changes in surface condition of internal-facing engine parts, human error in manufacturing or servicing, and third-party equipment failure.

Our products are intended to address the energy generation and storage and industrial heat businesses. As such, the energy storage products are intended to be financed by infrastructure-type financing deals, characterized by low returns over long repayment periods, compensated by high reliability and low risk. The way this reliability has typically been proven for entrants in the space is by building several demonstration systems used by pilot clients, and then accumulate a track record of little to no incident in operation over many years for all those systems. Only once this reliability proving step is achieved, do infrastructure-type financing become available.

This state of affairs also applies, albeit to a slightly lesser extent, to the industrial heat products we are building, and is why our business is particularly vulnerable to Negative Reputation Effects caused by reliability issues.

Beyond reliability issues, we may also be affected by negative press articles, whether based mostly on true facts or libelous, which would lead to similar Negative Reputation Effects.

We cannot guarantee that such Negative Reputation Effects, either caused by poor reliability of our products or services, or by negative press, will not happen.

The Company may be subject to various potential conflicts of interest.

Under certain circumstances, the Officers may make investments separate and apart from, or alongside, the Company. In the future, Company's Stockholder's Agreements could be enacted whereby the Officers may be permitted to manage other companies during the term of the Company's business life, any of which may conflict with the Company for investment opportunities, management time and attention, or otherwise. Provisions contained in such future Company's Stockholder's Agreement that would authorize the Officers to engage in investment, management or other activities outside, or alongside the Company, or to cause the Company to make investments in respect of which the Officers have conflicting interests, may override common law and statutory fiduciary duties that would apply in the absence of such provisions. Such future Company's Stockholder's Agreement may contain certain protections for Stockholders against conflicts of interest faced by the Officers, but will not purport to address all types of conflicts that may arise. Moreover, as a practical matter, it may be difficult for Stockholders to subject the behavior of the Officers to close scrutiny. During the term of the life of the Company, many different types of conflicts of interest may arise, and this Offering does not purport to identify all such conflicts. Stockholders ultimately will be heavily dependent upon the good faith of the Officers and the Board of Directors.

The SAFEs offered here may be difficult or even impossible to transfer or re-sell.

This Offering takes the form of SAFEs. The SAFE (Simple Agreement for Future

Equity) will not be freely tradable until at least one year from the initial purchase date.

Although the SAFE may be tradable under federal securities law, state securities regulations may apply and each Purchaser should consult with her or his attorney. You should be aware of the long-term nature of this investment. There is not now and likely will not be a public market for the SAFE (Simple Agreement for Future Equity). Because the SAFE has not been registered under the Securities Act or under the securities laws of any state or non-United States jurisdiction, the SAFE has transfer restrictions and cannot be resold in the United States except pursuant to Rule 501 of Regulation CF. It is not currently contemplated that registration under the Securities Act or other securities laws will be affected. Limitations on the transfer of the SAFE may also adversely affect the price that you might be able to obtain for the SAFE in a private sale. If a Purchaser is able to sell her or his SAFE, there is no guarantee that the Purchaser will be able to sell it for a price greater than—or equal to—the price the Purchaser paid for the SAFE.

Purchasers should be aware of the long-term nature of their investment in the Company. Each Purchaser in this Offering will be required to represent that it is purchasing the Securities for its own account, for investment purposes and not with a view to resale or distribution thereof.

The rights and the value of your investment may be reduced, and your future shares diluted, without your approval.

The Company is managed by its Board of Directors and Officers in accordance with the terms of the Company's Certificate of Incorporation and By-Laws. Consequently, you will have no ability to affect management decisions of the Company, except as expressly required otherwise by applicable law. Following the closing of this Offering, the Company's two founders will still own a majority of the Company's issued and outstanding Shares. They have the ability to exert significant influence over all matters requiring shareholder approval, including the election of Directors and the approval of mergers or other business combinations. This concentration of ownership may also delay, deter or prevent acts that would result in a change of control, which in turn could reduce the market price of your Shares. These actions could be taken even if they are opposed by other investors, including you.

Furthermore, we will likely need to engage in equity, debt, or preferred stock financing in the future. Your rights and the value of your investment could be reduced because of this. Interest on debt securities could increase costs and negatively impact operating results. Preferred stock could be issued in series from time to time with such designation, rights, preferences, and limitations as needed to raise capital. The terms of preferred stock could be more advantageous to other investors. In addition, if, in the future, we need to raise more equity capital from the sale of stock, institutional or other investors may negotiate terms at least as, and possibly more, favorable than the terms of your investment. Shares of our equity could be sold into any market which develops, which could adversely affect the market price.

Finally, neither the Offering nor the SAFEs have been registered under federal or state securities laws, leading to an absence of certain regulation applicable to the Company. No governmental agency has reviewed or passed upon this Offering, the Company or any securities of the Company. We also have relied on exemptions from securities registration requirements under applicable state securities laws. Investors, therefore, will not receive any of the benefits that such registration would otherwise provide. Prospective investors must therefore assess the adequacy of disclosure and the fairness of the terms of this Offering on their own or in conjunction with their personal advisors.

General economic conditions and volatility in the worldwide economy due to the COVID pandemic, Russia-Ukraine conflict and sanctions, systemic supply chain shortages, and recent negative stock market performance, has adversely affected spending in certain sectors, which may negatively affect the Company.

The Company's performance will depend significantly on economic conditions in several regions, including, yet not limited to, the United States, Australia, India, and Europe. Spending on capital investments is affected by a number of factors, including confidence in the strength of economies, fears of recession, the tightening of credit markets, higher levels of unemployment, higher tax rates, the cost of credit and other factors. These unfavorable economic conditions may cause public and private entities to reduce or eliminate infrastructure and capital spending, and institutional investors not to invest in our future rounds.

The Russia-Ukraine conflict, energy price shocks especially in Europe, global inflation, supply chain delays and shortages, and a lingering COVID-19 pandemic, have severely impacted the global economy. Lead times have increased significantly on many products containing any kind of electronic components, several raw materials are in short supply around the world including aluminum

several raw materials are in short supply around the world, including aluminum, plastics, and construction materials. Together with natural gas and other energy vectors supply shocks, this has caused the prices for more and more products and services of many kinds to increase, leading to inflation. Those factors, together, are severely hindering the ability of many businesses around the world to perform, supply products and services, and produce economic returns, globally. There is no guarantee that such conditions will not materially and adversely affect the business, operations, and economic viability of Airthium.

The duration and impact of such exceptional macroeconomic conditions, as well as the effectiveness of government and central bank responses remains currently unclear. It is not possible to reliably estimate the duration and severity of these consequences, as well as their impact on the financial position and results of the Company for future periods.

Finally, the COVID-19 virus could cause Airthium's key personnel to become debilitated or even die. If lost, these people would be costly to replace.

There are a number of risks associated with international operations that could harm Airthium's business.

Airthium plans to sell products and provide services on a global basis and plans eventually to expand into all countries with a need for seasonal energy storage or industrial heat. Airthium's ability to grow in international markets could be harmed by factors, including, yet not limited to:

- *changes in political and economic conditions and potential instability in certain regions;

- *currency control and repatriation issues;

- *changes in regulatory requirements or in foreign policy, including the adoption of domestic or foreign laws, regulations and interpretations detrimental to Airthium's business;

- *changes to regulatory incentives to purchase energy storage, including long-term or seasonal energy storage, and industrial heating equipment;

- *possible increased costs and additional regulatory burdens imposed on Airthium's business;

- *burdens of complying with a wide variety of laws and regulations;

- *difficulties in managing the staffing of international operations;

- *increased financial accounting and reporting burdens and complexities;

- *terrorist attacks, cyber attacks, and other safety and security concerns;

- *changes to tax laws, compliance costs and challenges to Airthium's tax positions that may have adverse tax consequences to us;

- *changes, disruptions or delays in shipping or import/export services;

- *reduced protection of Airthium's intellectual property rights.

Furthermore, prospective investors should note that Airthium is conducting today most of its functions, including research and development, management, finance, operations, and human resources, from outside the U.S., namely, from France. We plan to keep a large part of our operations, mostly research and development, in France, in the future, and intend to build manufacturing facilities in many parts of the world, including the US. The exact location of those manufacturing facilities is not decided yet. We intend to have a sales force in the US in the future, once we reach commercial deployment.

Airthium is subject to both U.S. and local laws and regulations applicable to Airthium's offshore activities, and any factors which reduce the anticipated benefits associated with providing these functions outside of the U.S. or France, including cost efficiencies and productivity improvements, could harm Airthium's business.

Our business model regarding energy storage products relies on several assumptions that are currently not proven. Below are four of the main such assumptions, which do not constitute an exhaustive list of such assumptions.

First, even if our clients wish to purchase our future energy products, we will still have to convince financial institutions to unlock infrastructure-type financing to finance the sale of our systems.

Indeed, the payback time on investment for our future energy storage products

is expected to be on the order of 10 years or more, which is too long for corporations to directly invest their own funds in our products. Most of our clients will have to rely on financial institutions providing infrastructure-type financing to make purchases from us and complete projects. Such institutions are known to be fairly risk-averse, and have a poor understanding of deep technical risk related to complex new technologies.

Should our customers be unable to obtain financing to make purchases from Airthium or maintain their businesses, or should they become insolvent due to market and economic conditions or otherwise, then Airthium's revenue, results of operations, cash flow, financial condition and ultimately its business could be negatively impacted.

We are mitigating this risk, mainly by using a beachhead market in the form of industrial heat pumps, which is less affected by short payback periods, and by allocating long time frames to the validation of the reliability of our systems, so that the risk associated with our new technology becomes smaller than the benefits awarded by its expected, yet not guaranteed, superior technical and economic performance compared to competing solutions.

Second, our energy storage system is based on several existing, but not yet industrialized, sub-systems, and relies on a unit cost for those sub-systems to be reached in the future.

Such sub-systems include, yet are not limited to, water electrolysis systems, so-called "electric Haber-Bosch" plants, ammonia burners, and flue gas to molten salt heat exchangers. Should the costs not fall low enough, our energy storage systems might not be competitive with other solutions. We mitigate this risk by investing time and money into a deep understanding of the space, partnership with relevant manufacturers, and a network of experts, to help us better ascertain the future cost decrease of those elements.

Third, although the Company believes there is a need for the seasonal energy storage systems it intends to offer as its products, its management is unable to guarantee:

(i) the level of market acceptance for those energy storage products and related services, (ii) the number of customers willing to actually buy or lease our energy storage systems, and (iii) the average customer lifetime value regarding their use of Airthium's products and services.

Fourth, our energy storage systems require the implementation of multiple technologies, including software to run the system.

Such a software is called an "Energy Management Software", and the true potential of our energy storage system to actually save money for our customers will depend on the quality of this Energy Management System. We have started to build such a software system in-house, and may use third-party software in the future to perform this task. However, we do not have yet a working software that would allow us to calculate a precise estimate of the total savings that our system could in principle realize for given potential clients and operating conditions. This means the upside of our system is still not completely clear, and any overestimate in our current models could materially and adversely impact our business.

Our Business Model regarding heat pump products, and other products, if any, relies on assumptions that are currently not proven. Below are four of the main such assumptions, which do not constitute an exhaustive list of such assumptions.

First, the sale of industrial heat pumps is a complex process. Even if the value proposition and payback time of a high temperature heat pump that works as intended end up being clearly apparent to an experienced manager in the field, the value chain that must be navigated to actually close industrial heat pump deals is complex. Plant owners have jurisdiction; plant operators must be convinced from an operational standpoint, and have a say in the final deal; third party manufacturers must be on board to modify equipment and integrate heat pumps; financing must be found; and finally, because heat pumps need a low temperature heat supply connection in addition to the high temperature heat delivery connection, gathering and bringing the low temperature heat to the heat pump can prove challenging in industrial environments. Convincing all the above parties, and other additional parties on a case by case basis, requires time and causes significant uncertainty on the outcome of the sales process. Should too many deals fail to materialize because of this complexity and its direct and indirect consequences, this might materially and adversely affect our business to the point of insolvency and/or bankruptcy.

Second, the economic viability of heat pump deals inherently depends on the price ratio between electricity and available fossil fuels for heating, especially

natural gas prices. We have heard several times from industry experts that deals have fallen through over the years they needed to be implemented, because the ratio of electricity price to gas price moved too much. Because of the unavoidable variability of this price ratio and its associated uncertainty, clients might decide not to buy our products, either from time to time or in a systemic fashion. In both cases, this might materially and adversely affect our business to the point of insolvency and/or bankruptcy.

Third, it might prove difficult or even nearly impossible to find actual business cases where clients are ultimately willing to purchase our heat pump products.

Just as many parties must agree for an industrial heat pump deal, actually installing and integrating a heat pump into a given industrial process has many consequences and constraints on the industrial site where the installation is to take place. For example, such consequences and constraints include, yet are not necessarily limited to: finding floor space to install the heat pump; finding a way to supply the heat to the process; meshing two or more heat supply technologies together, if needed, especially if the heat pump is sited next to a conventional gas heater used as backup; estimating and mitigating the impact of a heat pump fault; dealing with fluids needed by the heat pump, including molten nitrate salt and thermal oils; similarly, connecting the heat pump to a low temperature heat supply, sometimes backed up by conventional cooling towers; meshing the heat pump control software and hardware with the overall industrial process control software and hardware; designing and updating operational modes and operator manuals for the complete installation; working together with original equipment manufacturers (OEMs) for boilers, dryers and ovens, among other equipment, to integrate our technology to their products; and other integration and operational challenges. If any of those consequences and constraints are enough for one of the parties involved to call for a refusal of the installation project, then the deal might not materialize in a timely manner, or at all. Should too many such deals be impacted this way, this might materially and adversely affect our business to the point of insolvency and/or bankruptcy.

Fourth, our heat pump products might fail to reach the necessary efficiency, capital and operating cost, and reliability levels to generate sufficient sales for our heat pump business to avoid bankruptcy.

Heat pump deals are an attempt to both decrease operational costs and CO2 footprints of industrial processes. If the heat pump fails to operate efficiently enough, or if total ownership costs prove to be too high, then the value proposition can be degraded to the point where a deal does not make sense anymore. Therefore, despite the extensive efforts deployed by our team to build heat pumps that best suit to client needs, our efforts might prove insufficient in reaching the necessary performance and cost levels for deals to materialize. If this happens, this might materially and adversely affect our business to the point of insolvency and/or bankruptcy.

The Company currently has very limited financial visibility, or “runway”. If no cash enters our business accounts until June 20th 2023, then we face very significant risk of bankruptcy.

Our current cash on hand figures and burn rate point to our total cash reserves reaching zero somewhere between June and August 2023. In other words, if no new cash enters our business bank accounts until this date, we face strong risk of bankruptcy.

Furthermore, we are currently building our first 250°C heat pump prototype, which will push us to incur manufacturing, equipment, and assembly costs, of the order of \$30k to \$90k in total, in addition to payroll. Finally, we have an office rent due date on July 1st of around \$60k. This means that at least \$170k of cash must reach our US corporate bank account before June 20th, 2023, in order for us to be certain to meet payroll and rent in end of June 2023. Should we raise significant funds (\$1.2M+) pursuant to this Offering, then our runway would be extended by several months and the immediate risk of bankruptcy would temporarily subside.

Prospective investors are strongly advised to take into account the risks of bankruptcy associated with the current limited cash reserves and high burn rate of the Company before making any investment in the Company.

As a final note, prospective investors should read the following statements carefully.

Factual statements have not been independently verified. Except to the extent that legal counsel has been engaged solely to advise as to matters of law, no other party has been engaged to verify the accuracy or adequacy of any of the factual statements contained in this Offering. In particular, neither legal counsel nor any other party has been engaged to verify any statements relating to the experience, skills, contacts or other attributes of the Directors, officers and employees of the Company, or to the anticipated future performance of the Company.

General Risk of Insolvency. Each purchaser bears the risk that the financial

situation of the Company could deteriorate. There will be no security or guarantee to any purchaser in the Offering.

An investment in the Company is speculative. Purchasers of the securities offered hereby may not realize a return on their investment and could lose their investment. Purchasers should carefully review this offering disclosures and consult with their attorneys, tax advisors, and/or business advisors prior to purchasing the securities offered hereby.

Finally, the Risk Factors included in this Form C or its Appendices are not intended and should not be understood as an exhaustive list of all risks related to an investment in this offering.

The Company may never receive a future equity financing or elect to convert the Securities upon such future financing. In addition, the Company may never undergo a liquidity event such as a sale of the Company or an IPO. If neither the conversion of the Securities nor a liquidity event occurs, the Purchasers could be left holding the Securities in perpetuity. The Securities have numerous transfer restrictions and will likely be highly illiquid, with no secondary market on which to sell them. The Securities are not equity interests, have no ownership rights, have no rights to the Company's assets or profits and have no voting rights or ability to direct the Company or its actions.

Our future success depends on the efforts of a small management team. The loss of services of the members of the management team may have an adverse effect on the company. There can be no assurance that we will be successful in attracting and retaining other personnel we require to successfully grow our business.

INSTRUCTION TO QUESTION 8: Avoid generalized statements and include only those factors that are unique to the issuer. Discussion should be tailored to the issuer's business and the offering and should not repeat the factors addressed in the legends set forth above. No specific number of risk factors is required to be identified.

Ownership and Capital Structure

DESCRIPTION OF ISSUER'S SECURITIES

17. What other securities or classes of securities of the issuer are outstanding? Describe the material terms of any other outstanding securities or classes of securities of the issuer.

Class of Security	Securities (or Amount) Authorized	Securities (or Amount) Outstanding	Voting Rights
Common Stock	10,000,000	8,516,074	Yes <input type="button" value="v"/>

Class of Security	Securities Reserved for Issuance upon Exercise or Conversion
Warrants:	
Options:	732,715

24. Describe the material terms of any indebtedness of the issuer:

Loan

Lender	Andrei Klochko
Issue date	07/23/17
Amount	\$11,642.00
Outstanding principal plus interest	\$8,516.00 as of 12/28/23
Interest rate	0.0% per annum
Maturity date	12/31/27
Current with payments	Yes

This is a loan between one of the founders of Airthium Inc., Andrei Klochko (creditor) and the wholly owned subsidiary company Airthium SAS (debtor), initially labelled in euros at 10,000€. It bears no interest and must be repaid in full by December 31st, 2027. Part of the loan was repaid in 2021, 2022 and 2023, and as of December 29, 2023, 7698€ (\$8,516) is still due on this loan.

Loan

Lender	BPIFrance
Issue date	08/30/20

Amount	\$398,090.00
Outstanding principal plus interest	\$233,078.00 as of 04/18/24
Interest rate	2.25% per annum
Maturity date	08/31/26
Current with payments	Yes

The loan is made in euros for a principal amount of 350,000 €. By contract, we were to only pay interest on the loan until August 31st, 2022, included; then, we started paying principal plus interest quarterly and are to continue to do so until August 31st, 2026, included

INSTRUCTION TO QUESTION 24: name the creditor, amount owed, interest rate, maturity date, and any other material terms.

25. What other exempt offerings has the issuer conducted within the past three years?

Offering Date	Exemption	Security Type	Amount Sold	Use of Proceeds
4/2021	Regulation Crowdfunding	SAFE	\$972,786	General operations
7/2021	Regulation D, 506(c)	SAFE	\$300,000	General operations
4/2022	Regulation D, Rule 506(b)	SAFE	\$20,000	General operations
7/2022	Regulation D, Rule 506(b)	SAFE	\$25,000	General operations
11/2022	Regulation D, 506(c)	SAFE	\$100,000	General operations
5/2023	Regulation D, Rule 506(c)	SAFE	\$50,000	General operations
8/2023	Regulation D, Rule 506(c)	SAFE	\$10,000	General operations
8/2023	Regulation D, Rule 506(c)	SAFE	\$10,000	General operations
8/2023	Regulation D, Rule 506(c)	SAFE	\$100,000	General operations
10/2023	Regulation Crowdfunding	SAFE	\$1,276,403	General operations
12/2023	Other	SAFE	\$3,100,000	General operations

26. Was or is the issuer or any entities controlled by or under common control with the issuer a party to any transaction since the beginning of the issuer's last fiscal year, or any currently proposed transaction, where the amount involved exceeds five percent of the aggregate amount of capital raised by the issuer in reliance on Section 4(a)(6) of the Securities Act during the preceding 12- month period, including the amount the issuer seeks to raise in the current offering, in which any of the following persons had or is to have a direct or indirect material interest:

1. any director or officer of the issuer;
2. any person who is, as of the most recent practicable date, the beneficial owner of 20 percent or more of the issuer's outstanding voting equity securities, calculated on the basis of voting power;
3. if the issuer was incorporated or organized within the past three years, any promoter of the issuer;
4. or any immediate family member of any of the foregoing persons.

☒ Yes
☐ No

For each transaction specify the person, relationship to issuer, nature of interest in transaction, and amount of interest.

Name	Andrei KLOCHKO
Amount Invested	\$10,937.00
Transaction type	Other
Issue date	11/27/23
Relationship	Co-founder, CEO, Majority shareholder

Co-founder, CEO, major shareholder and technology inventor Andrei KLOCHKO received 10,000€ (\$10,937 as of November 27, 2023) in compensation from subsidiary Airthium SAS, for the sale to Airthium Inc. subsidiary Airthium SAS, of other company-related IP held in his name before the VC raise of December 5, 2023.

Name	Andrei KLOCHKO
Amount Invested	\$10 700 00

Transaction type	Other
Issue date	11/13/23
Relationship	Co-founder, CEO, Majority shareholder

Co-founder, CEO, major shareholder and technology inventor Andrei KLOCHKO received 10,000€ (\$10,700 as of November 13, 2023) in compensation from subsidiary Airthium SAS, for the sale to Airthium Inc. subsidiary Airthium SAS, of his stake of IP in the first patent filed by said subsidiary.

Name	Airthium SAS Shareholders
Amount Invested	\$11,221.00
Transaction type	Priced round
Issue date	06/04/17
Relationship	Airthium SAS became the fully owned subsidiary of Airthium Inc.

Name	Andrei Klochko
Amount Invested	\$11,642.00
Transaction type	Loan
Issue date	07/23/17
Outstanding principal plus interest	\$8,516.00 as of 12/28/23
Interest rate	0.0% per annum
Maturity date	12/31/27
Current with payments	Yes
Relationship	CEO and Co-founder Andrei Klochko personally loaned 10 k€ to the French subsidiary, Airthium SAS

INSTRUCTIONS TO QUESTION 26: The term transaction includes, but is not limited to, any financial transaction, arrangement or relationship (including any indebtedness or guarantee of indebtedness) or any series of similar transactions, arrangements or relationships.

Beneficial ownership for purposes of paragraph (2) shall be determined as of a date that is no more than 120 days prior to the date of filing of this offering statement and using the same calculation described in Question 6 of this Question and Answer format.

The term "member of the family" includes any child, stepchild, grandchild, parent, stepparent, grandparent, spouse or spousal equivalent, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law of the person, and includes adoptive relationships. The term "spousal equivalent" means a cohabitant occupying a relationship generally equivalent to that of a spouse.

Compute the amount of a related party's interest in any transaction without regard to the amount of the profit or loss involved in the transaction. Where it is not practicable to state the approximate amount of the interest, disclose the approximate amount involved in the transaction.

FINANCIAL CONDITION OF THE ISSUER

27. Does the issuer have an operating history?

- ☒ Yes
☐ No

28. Describe the financial condition of the issuer, including, to the extent material, liquidity, capital resources and historical results of operations.

Management's Discussion and Analysis of Financial Condition and Results of Operations

You should read the following discussion and analysis of our financial condition and results of operations together with our financial statements and the related notes and other financial information included elsewhere in this offering. Some of the information contained in this discussion and analysis, including information regarding the strategy and plans for our business, includes forward-looking statements that involve risks and uncertainties. You should review the "Risk Factors" section for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

A Breakthrough Engine to Replace Fossil Fuels

We can only impact climate change if we make solar and wind better than fossil fuels in "every" way. The lack of cheap seasonal energy storage, and low-cost green heat, are the last barriers holding renewables back from engulfing the world and stopping CO2 emissions. By unlocking renewables, we are tapping a \$138B/year business opportunity.

We build a heat engine that can cost-effectively replace natural gas at scale, for industrial heat and power generation. We believe it can make it cheaper not to pollute for those applications. We plan to replace industrial gas burners by high-temperature heat pumps, and gas-fired power plants by ammonia-based seasonal electricity storage. For both applications, we provide our proprietary heat engine, and other OEMs and integrators build, commission and maintain the balance of plant.

5 to 9 years from now, we plan to deliver our first high temperature (over 180°C) industrial heat pumps. From there, we plan to industrialize and then reach the infrastructure seasonal energy storage market, all the way up to GW scale in the 2030s. Those are forward looking projections, and cannot be guaranteed.

Milestones

Airthium Inc. was incorporated in the State of Delaware in May 2017.

Since then, we have:

- Joined the prestigious Y Combinator startup Accelerator in June 2017
- Recruited a team of 12 full-time employees, including 7 PhDs
- Formed an advisory board with 5 seasoned industry executives, including the former CEO of GE Renewables
- Built and tested one of the first Stirling engines worldwide capable of fast near-isothermal compression
- Filed our first patent (it, however, currently cannot be guaranteed that the patent will be granted)
- Raised an institutional SAFE seed round of \$3.1M with top-tier European VCs.

The Company is subject to risks and uncertainties common to early-stage companies. Given the Company's limited operating history, the Company cannot reliably estimate how much revenue it will receive in the future.

Historical Results of Operations

- *Revenues & Gross Margin.* For the period ended December 31, 2023, the Company had revenues of \$374,275 compared to the year ended December 31, 2022, when the Company had revenues of \$365,549. Our gross margin was 100.0% in fiscal year 2023, compared to 100.0% in 2022.
- *Assets.* As of December 31, 2023, the Company had total assets of \$5,026,816, including \$3,170,156 in cash. As of December 31, 2022, the Company had \$2,167,296 in total assets, including \$309,071 in cash.
- *Net Loss.* The Company has had net losses of \$1,223,955 and net losses of \$830,966 for the fiscal years ended December 31, 2023 and December 31, 2022, respectively.
- *Liabilities.* The Company's liabilities totaled \$8,145,145 for the fiscal year ended December 31, 2023 and \$4,116,438 for the fiscal year ended December 31, 2022.

Related Party Transaction

Refer to Question 26 of this Form C for disclosure of all related party transactions.

Liquidity & Capital Resources

To-date, the company has been financed with \$409,732 in debt, \$31,221 in equity, and \$3,795,000 in SAFEs excluding Reg. CF raises.

After the conclusion of this Offering, should we hit our minimum funding target, our projected runway is 4 months before we need to raise further capital.

We plan to use the proceeds as set forth in this Form C under "Use of Funds". We don't have any other sources of capital in the immediate future.

We will likely require additional financing in excess of the proceeds from the Offering in order to perform operations over the lifetime of the Company. We plan to raise capital in 12 months. Except as otherwise described in this Form C, we do not have additional sources of capital other than the proceeds from the offering. Because of the complexities and uncertainties in establishing a new business strategy, it is not possible to adequately project whether the proceeds of this offering will be sufficient to enable us to implement our strategy. This complexity and uncertainty will be increased if less than the maximum amount of securities offered in this offering is sold. The Company intends to raise additional capital in the future from investors. Although capital may be available for early-stage companies, there is no guarantee that the Company will receive any investments from investors.

Runway & Short/Mid Term Expenses

Airthium Inc. cash in hand is \$1,917,133, as of April 2024. Over the last three months, revenues have averaged \$0/month, cost of goods sold has averaged \$0/month, and operational expenses have averaged \$256,568/month, for an average burn rate of \$256,568 per month. Our intent is to be profitable in 84

storage rate of \$2500 per month set there to be payable in 12 months.

Several changes happened since December 31st, 2023.

First, regarding payroll, we hired two more employees, who are already working full time with Airthium, and signed a third, who will come to Airthium in July 2024. The first two are a senior mechanical engineer and a testing and diagnostics mechanical engineer, both holding a PhD in mechanical engineering; the third is a senior mechanical engineer who will bring much needed expertise from the field of hydraulic pump R&D. We are still hiring for 3 more roles, all senior.

Also regarding payroll, our expenses increased significantly, because of two reasons. First, we gave all of our employees a significant (>20%) raise to cope with both rising market wages and growing living expenses, caused by extremely strong inflation over the last two years. Second, our French subsidiary Airthium SAS (which pays >90% of all payroll) reached 8 fiscal years of existence. Because of this, we lost access to a very large payroll tax cut from the French government, which was based on our legal status of "JEI - Jeune Entreprise Innovante" (which translates to "Young Innovative Company"). This change in status was nearly the single reason why our payroll taxes increased from around 19% to 45% of base pay ("salaire brut"), on our typical salaries.

The largest change in our finances since our Dec. 31, 2023 financials is regarding heavy machinery. We bought for \$450k of advanced prototyping equipment, and hired contractors to modify and adapt our industrial prototyping space to the coming prototyping operations for about \$160k. This is a strategic decision, designed to both significantly shorten our prototyping iteration time and increase our execution quality. In 2023, it took one of our contractors 7 months to actually ship us some critical prototype parts - we cannot let that happen again. Even if we did get parts much faster, we would still need to modify them based on test results, and fast changes to hardware is precisely what in-house equipment is great at.

Finally, the number reported above of \$256,568 per month, averaged over 3 months, covers from January 1, 2024, to March 31, 2024. As of today (April 29, 2024), we have spent over \$455k (427 k€) over the last 30 days alone, mostly because of payments due on the heavy machinery and industrial space modifications. Most of those two expense groups are now paid.

Now that almost all the heavy machinery and space modifications are paid for, our expenses will consist of mostly payroll and prototype parts, both raw materials for parts we will make ourselves, finished parts in the few cases we will need them, and other components like sensors and ancillaries. We anticipate about \$222k per month over the next 6 months in our financial model.

We do not expect to generate any more significant sales this year, save for \$15.3k we invoiced on April 16, 2024 to our existing client, for their renewal of the licence of our in-house numerical simulation software, which they use for their own developments, unrelated to our heat pumps. We expect, but cannot guarantee, to generate a small revenue from the sales of electrification studies this year, and revenue from the installation and sales of heat pumps in 2027-2028. Our current estimate is that we will at least need between \$30M and \$50M of funding to reach first commercial revenue from heat pump sales (not demonstrator or pilot projects), and more than \$100M in funding to reach first revenue from energy storage systems, should we ever reach that step. Again, none of those future revenues can be guaranteed at this point.

We are not profitable and do not expect to be profitable before at least 2029. Should we even reach the point where we would be able to be profitable, we would most probably choose to invest our revenue into growth, R&D, operations, and international expansion. Indeed, it is our current belief that the value of our business strongly depends on our market share. Should we fail to seize a large market share with our innovative products as fast as possible, we might become much more vulnerable to competition, compared to the case where we would have achieved a large market share.

We believe we would need at least \$300M in funding to become profitable. All predictions contained here correspond to the current estimates from our small management team, and are not guaranteed.

We have raised \$3.1M of institutional (VC) capital, in the form of SAFEs, on December 5, 2023. Beyond that, we are planning to raise an institutional Series A in the next 8 to 24 months. This date could be delayed further or even forever if we fail to raise, and as such it is not guaranteed, since it is a forward-looking projection related to the future of the company and the future state of the fundraising market, the latter part being completely out of our control. However, subsidy opportunities do exist for Airthium, including, yet not limited to: startup subsidies from the French organisms BPIFrance and ADEME, European subsidies from the EIC, and other local funding for demonstrator projects. Airthium has obtained subsidies from the French government in the past, and has obtained significant amounts of research tax credit (>\$100k/year on average) every year since 2017 from the French government. However, future subsidies are not signed yet, and most of them are not even filed, and as such, obtaining them is not guaranteed at this point. Finally, we are currently negotiating business loans with French banks for our subsidiary, Airthium SAS.

All projections in the above narrative are forward-looking and not guaranteed.

INSTRUCTIONS TO QUESTION 28: The discussion must cover each year for which financial statements are provided. For issuers with no prior operating history, the discussion should focus on financial milestones and operational, liquidity and other challenges. For issuers with an operating history, the discussion should focus on whether historical results and cash flows are representative of what investors should expect in the future. Take into account the proceeds of the offering and any other known or pending sources of capital. Discuss how the proceeds from the offering will affect liquidity, whether receiving these funds and any other additional funds is necessary to the viability of the business, and how quickly the issuer anticipates using its available cash. Describe the other available sources of capital to the business, such as lines of credit or required contributions by shareholders. References to the issuer in this Question 28 and these instructions refer to the issuer and its predecessors, if any.

FINANCIAL INFORMATION

29. Include financial statements covering the two most recently completed fiscal years or the period(s) since inception, if shorter:

Refer to [Appendix C, Financial Statements](#)

I, Andrei Klochko, certify that:

- (1) the financial statements of Airthium Inc. included in this Form are true and complete in all material respects ; and
- (2) the financial information of Airthium Inc. included in this Form reflects accurately the information reported on the tax return for Airthium Inc. filed for the most recently completed fiscal year.

Andrei Klochko
CEO

OTHER MATERIAL INFORMATION

31. In addition to the information expressly required to be included in this Form, include:

- (1) any other material information presented to investors; and
- (2) such further material information, if any, as may be necessary to make the required statements, in the light of the circumstances under which they are made, not misleading.

The Lead Investor. As described above, each Investor that has entered into the Investor Agreement will grant a power of attorney to make voting decisions on behalf of that Investor to the Lead Investor (the "Proxy"). The Proxy is irrevocable unless and until a Successor Lead Investor takes the place of the Lead Investor, in which case, the Investor has a five (5) calendar day period to revoke the Proxy. Pursuant to the Proxy, the Lead Investor or his or her successor will make voting decisions and take any other actions in connection with the voting on Investors' behalf.

The Lead Investor is an experienced investor that is chosen to act in the role of Lead Investor on behalf of Investors that have a Proxy in effect. The Lead Investor will be chosen by the Company and approved by Wefunder Inc. and the identity of the initial Lead Investor will be disclosed to Investors before Investors make a final investment decision to purchase the securities related to the Company.

The Lead Investor can quit at any time or can be removed by Wefunder Inc. for cause or pursuant to a vote of investors as detailed in the Lead Investor Agreement. In the event the Lead Investor quits or is removed, the Company will choose a Successor Lead Investor who must be approved by Wefunder Inc. The identity of the Successor Lead Investor will be disclosed to Investors, and those that have a Proxy in effect can choose to either leave such Proxy in place or revoke such Proxy during a 5-day period beginning with notice of the replacement of the Lead Investor.

The Lead Investor will not receive any compensation for his or her services to the SPV. The Lead Investor may receive compensation if, in the future, Wefunder Advisors LLC forms a fund ("Fund") for accredited investors for the purpose of investing in a non-Regulation Crowdfunding offering of the Company. In such as circumstance, the Lead Investor may act as a portfolio manager for that Fund (and as a supervised person of Wefunder Advisors) and may be compensated through that role.

Although the Lead Investor may act in multiple roles with respect to the Company's offerings and may potentially be compensated for some of its

services, the Lead Investor's goal is to maximize the value of the Company and therefore maximize the value of securities issued by or related to the Company. As a result, the Lead Investor's interests should always be aligned with those of Investors. It is, however, possible that in some limited circumstances the Lead Investor's interests could diverge from the interests of Investors, as discussed in section 8 above.

Investors that wish to purchase securities related to the Company through Wefunder Portal must agree to give the Proxy described above to the Lead Investor, provided that if the Lead Investor is replaced, the Investor will have a 5-day period during which he or she may revoke the Proxy. If the Proxy is not revoked during this 5-day period, it will remain in effect.

Tax Filings. In order to complete necessary tax filings, the SPV is required to include information about each investor who holds an interest in the SPV, including each investor's taxpayer identification number ("TIN") (e.g., social security number or employer identification number). To the extent they have not already done so, each investor will be required to provide their TIN within the earlier of (i) two (2) years of making their investment or (ii) twenty (20) days prior to the date of any distribution from the SPV. If an investor does not provide their TIN within this time, the SPV reserves the right to withhold from any proceeds otherwise payable to the Investor an amount necessary for the SPV to satisfy its tax withholding obligations as well as the SPV's reasonable estimation of any penalties that may be charged by the IRS or other relevant authority as a result of the investor's failure to provide their TIN. Investors should carefully review the terms of the SPV Subscription Agreement for additional information about tax filings.

INSTRUCTIONS TO QUESTION 30: If information is presented to investors in a format, media or other means not able to be reflected in text or portable document format, the issuer should include:
(a) a description of the material content of such information;
(b) a description of the format in which such disclosure is presented; and
(c) in the case of disclosure in video, audio or other dynamic media or format, a transcript or description of such disclosure.

ONGOING REPORTING

32. The issuer will file a report electronically with the Securities & Exchange Commission annually and post the report on its website, no later than:

120 days after the end of each fiscal year covered by the report.

33. Once posted, the annual report may be found on the issuer's website at:

www.airthium.com/invest

The issuer must continue to comply with the ongoing reporting requirements until:

1. the issuer is required to file reports under Exchange Act Sections 13(a) or 15(d);
2. the issuer has filed at least one annual report and has fewer than 300 holders of record;
3. the issuer has filed at least three annual reports and has total assets that do not exceed \$10 million;
4. the issuer or another party purchases or repurchases all of the securities issued pursuant to Section 4(a)(6), including any payment in full of debt securities or any complete redemption of redeemable securities; or the issuer liquidates or dissolves in accordance with state law.

APPENDICES

[Appendix A: Business Description & Plan](#)

[Appendix C: Financial Statements](#)

[Financials 1](#)

[Appendix D: Director & Officer Work History](#)

[Andreï Klochko](#)

[Franck Lahaye](#)

[Appendix E: Supporting Documents](#)

[AIRTHIUM_Inc._2022_Financial_Statements_FINAL_-_Signed.pdf](#)

[Add new Form C attachment \(admin only\)](#)

Signatures

Intentional misstatements or omissions of facts constitute federal criminal violations. See 18 U.S.C. 1001.

The following documents will be filed with the SEC:

[Cover Page XML](#)

[Offering Statement \(this page\)](#)

[Appendix A: Business Description & Plan](#)

[Appendix B: Investor Contracts](#)

[SPV Subscription Agreement](#)

[SAFE \(Simple Agreement for Future Equity\)](#)

[Appendix C: Financial Statements](#)

[Financials 1](#)

[Appendix D: Director & Officer Work History](#)

[Andreï Klochko](#)

[Franck Lahaye](#)

[Appendix E: Supporting Documents](#)

[AIRTHIUM_Inc._2022_Financial_Statements_FINAL_-_Signed.pdf](#)

Pursuant to the requirements of Sections 4(a)(6) and 4A of the Securities Act of 1933 and Regulation Crowdfunding (§ 227.100 et seq.), the issuer certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Annual Report and has duly caused this Form to be signed on its behalf by the duly authorized undersigned.

Airthium Inc.

By

Andreï Klochko

Co-Founder, CEO & CSO

Pursuant to the requirements of Sections 4(a)(6) and 4A of the Securities Act of 1933 and Regulation Crowdfunding (§ 227.100 et seq.), this Annual Report and Transfer Agent Agreement has been signed by the following persons in the capacities and on the dates indicated.

Andreï Klochko

Co-Founder, CEO & CSO

4/29/2024

Franck Lahaye

Co-Founder, COO

4/29/2024

The Annual Report must be signed by the issuer, its principal executive officer or officers, its principal financial officer, its controller or principal accounting officer and at least a majority of the board of directors or persons performing similar functions.

I authorize Wefunder Portal to submit a Annual Report to the SEC based on the information I provided through this online form and my company's Wefunder profile.

As an authorized representative of the company, I appoint Wefunder Portal as the company's true and lawful representative and attorney-in-fact, in the company's name, place and stead to make, execute, sign, acknowledge, swear to and file a Annual Report on the company's behalf. This power of attorney is coupled with an interest and is irrevocable. The company hereby waives any and all defenses that may be available to contest, negate or disaffirm the actions of Wefunder Portal taken in good faith under or in reliance upon this power of attorney.