

Minimum  
Amount Per  
Investor:

**₹7,50,000**



## Company Overview

Founded by childhood friends Aayush Jha and Udayan Banerjee in 2018. Clairco, a cleantech startup – SaaS based complete Indoor Air Quality management solution making the adoption of air purification affordable, measurable, and scalable by leveraging technological innovations in the ventilation systems of commercial real estate like offices, airport, a metro station, shopping malls, schools, hospitals, tech parks. Clairco stands for 'clean air company' which helps large enterprises in maintaining their indoor air quality with enhanced air purification and real-time insights to reduce maintenance costs, increase energy efficiency, and improve occupant experience. They have developed a patented technology to convert existing air ventilation units into air purification systems to become the world's first company that can guarantee clean air. With this innovation, Clairco has been able to make the adoption of air purification much more affordable, measurable, and scalable.

## Problems:

- Clean & safe air is a must-have in the post-COVID world and is becoming a mandatory guideline for buildings.
- Low adoption of air purification due to high capital expenditure.
- Heavy CapEx & retro fit & operational difficulties in implementation of purification solutions due to lack of an end-to-end solution and changes are invisible to occupants.

## Clairco Solutions: Clean air as a service at Zero-CapEx

- **Zero Building Downtime:** High efficiency low drag retro-fittable filters for enhanced air purification in buildings along with proprietary nano-tech based airborne pathogen solution. Existing industry solutions require HVAC overhaul and complete building shutdown for months.
- **Zero-Cap-Ex Clean Air as a Service:** Clairco charges a fixed monthly subscription fee as opposed to heavy Cap-Ex being charged by conventional solutions which is 20% more affordable over 3 years.
- **SLA backed Guaranteed Clean Air (enabled by granted patent):** Clairco signs an SLA with customers and does not charge for months in which SLA is breached.
- **AI/ML enabled integrated IoT platform:** Clairco provides an integrated IoT platform for optimizing the performance of the purification system and guaranteeing clean air at all times.

## Patented Tech: 2 Patents granted & 2 Patents pending

- **Proprietary Nano-tech based Anti-microbial system** – Clairco's patented system to predict filter life with Pressure drop and image classification data with 98.7% accuracy which enables us to guarantee clean air.
- **Predictive Filter Life management** – Clairco's patented system to predict filter life with Pressure drop and image classification data with 98.7% accuracy which enables us to guarantee clean air.
- **Data Driven advanced pathogen mitigation** – Clairco's patent pending Nano-tech based airborne pathogen mitigation system uses temperature, humidity & occupancy data to optimise the efficacy of the system 5x without harmful side-effects.
- **Smart Ventilation System** – Clairco's Patent Pending Ventilation system takes in Fresh Air based on multiple variables like: 1) Indoor occupancy, 2) Humidity, 3) Outdoor NOx, SOx & PM 2.5, 4) Indoor Air pressure. The AI and ML models analyse the data and predict the need to intake fresh air before or a little after the need.

## Features:

Clairco would retrofit the air handling unit with a low-pressure drop Clairco Filter, compatible with the existing systems. That would inline with services like:

- **Indoor air quality monitoring**- Clairco's air quality monitors are **IoT devices** that are accurate and app-enabled. They are designed and manufactured in India, and are **REACH, CE and GreenPro certified**.
- **Indoor air purification**- Clairco has filters that are **GreenPro Ecolabel certified** while enabling the clients to get additional credits in green building certification systems.
- **In-depth monthly reports**- Clairco's full-featured **web dashboard** allows its customers to download historical data, compare monitors, plot averages, and generate reports.
- **Real-time monitoring using web-app**- Clairco displays real-time air quality data of the entire property using their secured login **enabled dashboard with deep insights**.

## Growth & Revenue:

Clairco is collectively managing around 6 million sq ft across India and helping 100K people breathe clean & healthy air on a daily basis. Currently they are serving more than 25 Paying clients and have an ARR of INR 4.2 CR. Their LTV is around INR 84 Lakhs and CAC is INR 3.2 Lakhs. Their Clientle includes Brigade Group, Brookfield, Wework, EMAAR, Pepsico, CBRE, CapitalLand, Axis Bank, Smartworks, HERO, Max estates, Vatika, My home group etc.

## Key References – Founded in 2018 | Headquartered in Bengaluru, Karnataka

- Managing 6 Million Sq. Ft across India
- ARR= INR4.2 Cr(56% new clients & 44% vintage clients)
- LTV = INR 84 lakhs
- CAC = INR 3.2 Lakhs
- LTV:CAC ratio = 26
- High Profile Clientele

We manage 6 Mn sq.ft. & touch lives of over 100k people daily



- Media Coverage



## Awards:

- Forbes 30 under 30Asia 2020 (Co-founders)
- Tech India “Green start-up of the year”
- Business Today’s coolest start-up of the year 2019

## Market Opportunity

- The Commercial Real Estate Market in India is segmented by Type (Offices, Retail, Industrial and Logistics, and Hospitality) and Key Cities (Bengaluru, Hyderabad, Mumbai, Delhi NCR, Pune, Chennai, Kolkata, Ahmedabad, and Rest of India). The commercial real estate market in India is expected to grow at a CAGR of approximately 13% during forecast period (2022-2027). The global commercial real estate market size is more than \$800 billion according to commercial real estate market research.
- The HVAC systems market in India will grow by USD 2.26 billion from 2020 to 2024, progressing at a CAGR of almost 10% during the forecast period. The global HVAC systems market size was valued at USD 136.3 billion in 2021 and is projected to expand at a compound annual growth rate (CAGR) of 6.3% from 2022 to 2030. Varied climatic conditions and the need to maintain an ambient environment in a building is a key trend that is expected to impact the market over the forecast period.

## Business Model & Revenue Model

Model	Contract period	Billed revenue for FY 22	Contracted revenue for FY 23	Gross Margin FY 23	Customer acquisition time	Average ticket size per month with 36 months lock-in
SaaS (Clean air as a service)	5 years (3 years lock-in); <b>Zero churn till date</b>	1.2 cr	2.3 cr	55%	6 months*	1.4 L
One-time sale (Capex)	-	1.4 cr	0.79 Cr	30%	3 months	1.7 L

\*As offices open up at scale, ticket size will increase with faster acquisition time.



## Unit Economics (1L sq.ft=1L/Month revenue)

Unit Economics for 1 lac sq ft	Launch cost	Y1 maintenance	Y2 maintenance	Y3 maintenance	Total cost of 3 years	Remarks
Filtration	₹360,633	₹0	₹324,570	₹324,570	₹1,009,772	Y2 & Y3 cost reduced due to salvage value of filter media
Pathogen Tech	₹0	₹132,283	₹132,283	₹132,283	₹396,849	Asset Financing
IoT & Software	₹0	₹82,577	₹82,577	₹82,577	₹247,731	Asset Financing
Labour	₹6,818	₹10,162	₹10,162	₹10,162	₹37,303	
Transport, Travel & Accomodation	₹3,636	₹1,016	₹1,016	₹1,016	₹6,684	
<b>Total</b>	<b>₹371,087</b>				<b>₹1,698,339</b>	
<b>Revenue for 3 years @1 Re/sqft/month</b>	<b>₹3,768,000</b>					
<b>Gross Profit for 3 years</b>	<b>₹2,069,661</b>					
<b>Gross Margin for 3 years</b>	<b>55%</b>					

# Founding Team

## Ayush Jha | Co Founder & CEO

Ayush has more than 9 years of experience in the startup ecosystem and has previously been the part of various startups like Bumper.com, Brightbox etc. He has completed his bachelor's degree in Law from Chanakya National Law University, Patna. He was part of a summer school program at The London School of Political Science. He has won the Forbes 30 under 30 Asia award

## Udayan Banerjee | Co Founder

Udayan has an experience of 9 years in operations management and leadership predominantly in the startup environment. He has previously worked with startups like K12, Oyo etc. He completed his BTech from IIT Varanasi, and also completed his Post Graduation Program in AI from Texas McCombs School of Business. He has won the Forbes 30 under 30 Asia award.

## Why to Invest

**Massive Market Opportunity in the Commercial Real Estate & HVAC Space** – Clairco is tapping the commercial Real Estate Market in India which is segmented by type i.e Offices, Retail, Industrial and Logistics, and Hospitality and is expected to grow at a CAGR of approximately 13% during forecast period (2022–2027) thereby giving them a massive business opportunity in India itself. Given that the Clean & safe air is a must-have in the post-COVID world and is becoming a mandatory guideline for buildings, hence the HVAC systems market in India will grow by USD 2.26 billion from 2020 to 2024, progressing at a CAGR of almost 10% during the forecast period.

**Union government to frame indoor air quality norms and provide protocols for their regulation:** Shopping malls, hotels, theatres, educational institutions, office buildings and similar places with public gatherings may soon have to regulate indoor air quality for the safety of their patrons. The National Green Tribunal (NGT), by an order issued on 29th April 2022, set a deadline of four months for the Union government to frame indoor air quality norms and provide protocols for their regulation. This will be a major trigger for Clairco to cash in this massive opportunity. Here is the link for the same: <https://www.hindustantimes.com/cities/delhi-news/frame-rules-to-regulate-indoor-air-quality-in-4-months-ngt-tells-centre-101651192630585.html>

**Promising Traction & Future growth plans** – Clairco is currently managing more than 6 Million Sq. Ft across India and helping 100K people breathe clean & healthy air on a daily basis. They are serving more than 25 paying clients and have an ARR of INR 4.2 CR. Their LTV is around INR 84 Lakhs and CAC is INR 3.2 Lakhs. They are currently speaking with more than 40 brands and have a strong sales pipeline of INR 6.8 CR which is currently under initial negotiations and is expected to be closed in 3-5 months of time; they also have another INR 1.8 CR of Sales Pipeline which will be closed in the next 2 months of time. Clairco is also planning to explore into global markets especially in the SE Asia markets as they feel there is an urgent need in the industry due to reopening post pandemic worldwide. Also, they are serving some international clients like Brookfield, WeWork, Capitaland and Emmar in India which can help them clock some international contracts.

**Strong Competitive advantage resulting to building a strong brand value** – Clairco has a very strong USP compared to other players which makes them quite different and unique in this space. They provide guaranteed Zero-CapEx clean air as a services by deploying AI and ML to make the systems smarter than any other system enabling them to predict, save costs and guarantee clean air. Their solution is at least 25% more affordable than other players. They have 2 granted patents and have filed 2 patents which are pending to be granted. Their tech based solutions make them unique and create a very strong competitive advantage over other players in the market which will help them making a strong brand in the near future.

**Backed by strong clientele and strong investors** – Clairco is gaining a very strong traction and have already achieved the product and market fit, they are currently working with very well-known players like Brigade group, EMAAR, HERO, PepsiCo, Chennai International Airport, Wework, Axis Bank etc. They have backing by investors like Sanjiv Bajaj, Bajaj Capital joint chairman and MD by way of Anicut Capital (Lead investor), Second Century Ventures – US based venture capital fund, Climate Angels AngelList, Max Ventures, Marks Emballage, which are bringing their expertise on the table.

## Financials

Monthly MIS - FY21 - 22													
	21-Apr	21-May	21-Jun	21-Jul	21-Aug	21-Sep	21-Oct	21-Nov	21-Dec	22-Jan	22-Feb	22-Mar	Total
Revenue	1,493,756	1,381,842	660,661	660,661	1,975,661	4,132,630	2,418,995	1,664,967	2,294,124	3,447,052	3,483,477	2,368,410	25,982,237
Direct Cost	915,671	3,238,027	2,879,485	888,046	1,358,801	460,125	2,304,841	851,078	1,486,227	1,345,169	1,736,109	1,324,332	18,787,912
Gross Profit	578,085	(1,856,184)	(2,218,824)	(227,385)	616,861	3,672,505	114,154	813,888	807,897	2,101,883	1,747,369	1,044,079	7,194,326
Gross Margin %	39%	-134%	-336%	-34%	31%	89%	5%	49%	35%	61%	50%	44%	28%
Sales and General Administration (SGA)													
Salaries	581,368	508,354	610,154	725,476	748,191	851,838	1,096,265	1,091,602	1,284,169	1,734,983	1,307,864	1,898,948	12,439,212
Utilities	83,057	142,597	99,624	99,800	2,170	9,165	183,614	7,666	14,788	171,224	417,365	2,952,259	4,183,331
Professional Services	1,008,966	-	150,000	111,146	56,866	62,034	169,678	183,530	535,152	62,314	130,975	544,384	3,015,043
Marketing Costs	-	-	-	-	-	-	-	-	161,068	20,000	113,136	503,459	797,663
Total SGA	1,673,391	650,951	859,778	936,422	807,227	923,037	1,449,557	1,282,798	1,995,177	1,988,520	1,969,339	5,899,051	20,435,248
EBITDA	(1,095,306)	(2,507,136)	(3,078,602)	(1,163,807)	(190,367)	2,749,467	(1,335,404)	(468,909)	(1,187,280)	113,363	(221,971)	(4,854,972)	(13,240,923)
EBITDA Margin %	-73%	-181%	-466%	-176%	-10%	67%	-55%	-28%	-52%	3%	-6%	-205%	-51%

Monthly MIS - FY22 - 23				
	22-Apr	22-May	22-Jun	22-Jul
<b>Revenue</b>	<b>3,056,818</b>	<b>4,417,048</b>	<b>2,509,400</b>	<b>3,291,856</b>
<b>Direct Cost</b>	<b>1,461,248</b>	<b>2,686,575</b>	<b>1,786,327</b>	<b>1,922,243</b>
<b>Gross Profit</b>	<b>1,595,570</b>	<b>1,730,473</b>	<b>723,073</b>	<b>1,369,613</b>
<b>Gross Margin %</b>	<b>52%</b>	<b>39%</b>	<b>29%</b>	<b>42%</b>
<b>Sales and General Administration (SGA)</b>				
<b>Salaries</b>	<b>1,221,954</b>	<b>1,053,289</b>	<b>1,069,529</b>	<b>1,212,749</b>
<b>Professional Services</b>	<b>99,644</b>	<b>27,000</b>	<b>15,340</b>	<b>38,350</b>
<b>Marketing Costs</b>	<b>4,405,145</b>		<b>279,800</b>	<b>260,000</b>
<b>Total SGA</b>	<b>5,726,743</b>	<b>1,080,289</b>	<b>1,364,669</b>	<b>1,511,099</b>
<b>EBITDA</b>	<b>(4,131,173)</b>	<b>650,184</b>	<b>(641,596)</b>	<b>(141,486)</b>
<b>EBITDA Margin %</b>	<b>-135%</b>	<b>15%</b>	<b>-26%</b>	<b>-4%</b>

## Financial Projections

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
	Plan	Plan	Plan	Plan	Plan
<b>Revenue from Operations</b>					
Opex Revenue	4.95	22.58	62.56	129.84	245.60
Capex Revenue	4.99	9.68	15.64	22.91	27.29
Other Income	0.17	0.66	1.52	2.78	4.83
<b>Total Income</b>	<b>10.11</b>	<b>32.91</b>	<b>79.73</b>	<b>155.53</b>	<b>277.73</b>
<b>Total Cost of Services</b>	<b>7.13</b>	<b>18.57</b>	<b>38.15</b>	<b>65.81</b>	<b>91.33</b>
<b>Gross Profit:</b>	<b>2.97</b>	<b>14.34</b>	<b>41.58</b>	<b>89.72</b>	<b>186.40</b>
<b>GP%</b>	<b>29%</b>	<b>44%</b>	<b>52%</b>	<b>58%</b>	<b>67%</b>
<b>EBITDA</b>	<b>0.52</b>	<b>5.61</b>	<b>24.32</b>	<b>61.89</b>	<b>144.89</b>
<b>EBITDA%</b>	<b>0.05</b>	<b>0.17</b>	<b>0.30</b>	<b>0.40</b>	<b>0.52</b>
<b>Net Profit</b>	<b>0.32</b>	<b>4.65</b>	<b>21.54</b>	<b>55.97</b>	<b>138.64</b>
<b>%</b>	<b>3%</b>	<b>14%</b>	<b>27%</b>	<b>36%</b>	<b>50%</b>

## Fund Requirement

Fund Requirement	Commitment Received	Name of the investor who has committed for this round	Pre Money-Valuation	Balance Funds Sought from Hem Angels
INR 8 Cr	INR 4 Cr	Second Century ventures: (money in the bank), Grip invest: , Sridhart Srigeri, Theia Ventures: , Climate Angels: , Lets Venture:	Convertible round with no floor and a US\$15 M ceiling with 30% discount in next round if it is raised in calendar year 2023	INR 3.9 Cr
<b>Fund Usage:</b> Tech development: 20%, Sales team expansion: 15%, Marketing & Branding:10%, International Pilots: 15%, International certifications and R&D: 20%, Operational Capital and buffer: 20%				

## Previous Funding Round

Date	Amount	Investor(s)	Pre Money-Valuation
Feb 2021	INR 3.75 Cr	Anicut Capital, Angellist, Max Ventures, Marks Emballage	INR 18.75 Cr

## Cap Table

Cap Table	% Holdings
Founders	64.64
Brigade Innovations	3.72
Vistra ITCL	7.77
UTPL Corporate Trustees	15.79
Max Limited	3.15
Other Angel Investors	4.94

## Competitive Landscape

### Current Competitive Analysis

Low cost- Complete solution  
(20% more affordable despite the SaaS model)



High cost- Complete solution (System Integrator)



**VOLTAS**

All systems work in silos and have zero predictability, hence no guarantees or skin in the game.

Low cost-limited solution

**3M**



**AAF**



\*  
airveda



High cost- limited solution

**Honeywell**



**TRION**  
Indoor Air Quality



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