

PUBLIC-SOURCE COMPANY AND MARKET RESEARCH

Atlas Agro Science

Company, technology, products, people, commercial evolution, market position and adversarial due diligence

Target: „АТЛАС АГРО САЙЪНС“ ООД / ATLAS AGRO SCIENCE

Bulgarian UIC: 205844188

Research cutoff: 30 August 2026 (UTC)

Evidence base: statutory records, patents, regulatory orders, filed accounts, scientific literature, institutional sources, archived company material and independent reporting

This report is accompanied by the complete local archive, extracted text, source catalog, claim ledger, exact-hash duplicate map and adversarial-review log. It is not legal, agronomic, safety or investment advice.

Contents

Executive assessment

1. Identity and scope
2. Condensed timeline
3. Founding, people and ownership
4. Technology and intellectual property
5. The early sludge-derived business
6. The pivot to current agricultural products
7. Scientific and field evidence
8. Commercial model, distribution and pricing

9. Financial development

10. Funding, accelerators and awards
11. Market context and addressable opportunity
12. Claims classification: fact, supported claim and marketing
13. Adversarial due-diligence assessment
14. Residual unknowns and research limits
15. Source method and reliability

Appendix A — Principal public sources

Appendix B — Key conclusions by confidence

Company, technology, products, people, commercial evolution and market position

Research cutoff: 30 August 2026 (UTC)

Target legal entity: „АТЛАС АГРО САЙЪНС“ ООД / ATLAS AGRO SCIENCE

Bulgarian UIC: 205844188

Status: active Bulgarian limited-liability company

Purpose: comprehensive public-source research and adversarial due diligence

Executive assessment

Atlas Agro Science is a small Bulgarian fertilizer and biostimulant producer whose story has two materially different chapters.

The first chapter began in Stara Zagora with academic work on sewage-treatment sludge and an attempt to turn aged wastewater sludge into liquid plant biostimulants. The company was incorporated on 2 October 2019, filed a patent application in January 2020 and a utility model in October 2020, built a prototype, obtained a small waste-treatment authorization in 2021, attracted accelerator and grant support, and marketed the **Atlas Universal** family mainly for landscaping. The underlying Bulgarian patent was eventually granted in August 2024 and remains active. This chapter produced genuine intellectual property and one public peer-reviewed field paper, but it did not overcome the Bulgarian regulatory barrier to agricultural use of processed sewage sludge.

The second chapter is the current agricultural product line. **Atlas Terra** was registered for market use on 31 January 2024, while **Atlas Terra Nitro** and **Atlas Terra Amino** were registered on 18 December 2024 and launched publicly in January 2025. The signed orders describe molasses- and leonardite-based products, not sewage-sludge products. The company itself acknowledges that sludge-derived fertilizer remained prohibited for agricultural use and says it developed a regulator-compatible product. This is therefore best understood as a **commercial and formulation pivot**, not as regulatory commercialization of the sludge patent.

The financial record is consistent with a micro-enterprise moving from grant-backed development toward early product sales. Filed net sales rose from BGN 6,000 in 2021 to BGN 64,000 in 2022, BGN 149,000 in 2023 and BGN 247,000 in 2024. Financing income of BGN 46,000 in 2022 and BGN 123,000 in 2023 was economically important; it disappeared from the 2024 income statement, when the company generated BGN 76,000 after-tax profit. This is the best commercial year in the public record, but BGN 247,000 of sales remains tiny beside Bulgaria's broad BGN 950.1 million 2024 expenditure on fertilizers and soil improvers.

The strongest assets are:

- authentic Bulgarian IP, owned by the company and invented by scientific cofounders Assoc. Prof. Diya Dermendzhieva and Prof. Georgi Beev;
- verified product registrations for three current formulations;
- a credible academic origin and one published two-season crop study for the earlier **Atlas Universal** formulation;
- evidence of increasing sales through 2024;
- participation in recognized innovation programs, an EUR 78,700 Norway Grants award, and selection for EIT Food's 2025 Test Farms cohort;
- a current distributor offering bundled agronomic services, tiered pricing and financing.

The central weaknesses are:

- no published 2025 accounts yet; the statutory filing deadline was still in the future at the cutoff;
- no public customer concentration, production volume, order book, recurring-revenue, gross-margin, export, distributor-contract or procurement data;
- no public independent outcome from the 2025 EIT field trial and no peer-reviewed trial of the current Terra/Nitro/Amino formulations;
- material marketing overreach around “patented technology,” eco-scheme eligibility, nitrogen reduction, crop results and safety;
- stale and sometimes inconsistent doses/compositions between the company site, distributor pages and regulator documents;
- all three direct distributor product pages were marked out of stock on the research date;
- an unexplained mismatch between the company’s narrative of its founding team and the legal founders, plus an unresolved identity distinction among several similarly named Nikolays.

The company should not be dismissed as marketing-only: the patent, utility model, permits, registrations, financials and scientific founders are real. It also should not be treated as a proven scale-up: its current products are only lightly validated in public, its commercial scale is very small, and its most distinctive patented technology is not the formulation documented for the products it currently sells.

Bottom line

Current public-evidence rating: technically credible early-stage micro-enterprise; commercial traction is real but small; the distinctive sludge IP and current registered formulations are not proven to be the same product platform; performance and scale claims require primary diligence.

1. Identity and scope

The researched entity is the Bulgarian company recorded by the [Bulgarian Registry Agency](#), UIC 205844188. Its current deed and historical deed snapshots are archived under [registry/](#).

This matters because web results contain several unrelated “Atlas Agro” businesses. The following were excluded:

- the Swiss company developing green-ammonia fertilizer plants;
- Brazilian, UAE and other agricultural companies with similar English names;
- an older Bulgarian company-name match;
- [Atlas Terra Power](#), whose Bulgarian mark is owned by ТЕРА ПАУЪР ЕООД;
- ATC Agro Finance, which is a separate Bulgarian legal entity even though Atlas describes it as part of its commercial structure.

The current registered name is transliterated [ATLAS AGRO SCIENCE](#). Older company material uses [ATLAS AGRO – SCIENCE Ltd.](#) and similar punctuation. These variations refer to the same UIC.

2. Condensed timeline

Date	Event	Evidence and interpretation
2016	Diya Dermendzhieva completes a doctorate on the ecological and agro-ecological characterization of wastewater and wastewater-treatment sludge.	Official Trakia University material; establishes a pre-company scientific origin.
2 Oct 2019	Atlas Agro Science is incorporated in Sofia with BGN 1,000 capital.	Registry Agency deed. Five legal founders: Mariana Minkova 30%, Aleksandra Velkova 30%, Nikolay Mitkov Mitkov 20%, Diya Dermendzhieva 10%, Georgi Beev 10%. Nikolay Mitkov is manager.
17 Jan 2020	Patent application BG/P/2020/113066 filed.	Bulgarian Patent Office. Filing is not grant.
2020	Prototype and innovation-program activity; Atlas wins the Bulgarian EIT Food RIS Innovation Prize and audience award and reaches the international final.	Institutional and program material. It did not win the international Grand Final.
14 Oct 2020	Utility-model application BG/U/2020/5127 filed.	Bulgarian Patent Office.
2021	Aleksandra Velkova becomes manager; the office moves to Bulgaria Blvd. 102. Utility model BG 4083 is registered. Environmental screening and waste-treatment registration are issued for Hrishteni, Stara Zagora.	Registry, Patent Office, RIEW and waste decision. The authorization is for only 36.5 tonnes/year of wastewater sludge.
2021	Green Innovation recognition and Sofia Tech Park support.	Applied Research and Communications Fund. Award recognition is not product certification.
2022	Nikolay Mitkov exits; Mariana rises to 40%; Elizabet Petrova enters at 10%.	Registry deed.
May 2022	Wayback catalogue shows the early Atlas Universal variants Aquapon, Flora, Grass, Green and Orchids.	Archived historical site.
Jul 2022–Oct 2023	Norway Grants project runs under contract 2021/335111.	Company grant disclosure: EUR 92,661 total budget, EUR 78,700 grant. Public official-project database record was not found.
Feb 2023	Elizabet Petrova exits; ownership becomes Mariana 45%, Aleksandra 35%, Diya 10%, Georgi 10%.	Registry deed.
Aug 2023	Founders publicly acknowledge the sludge product is usable only in landscaping, not agriculture; the company is not self-sustaining and is kept alive by founders' other businesses.	Economic.bg interview. This is unusually probative because it runs against promotional framing.
31 Jan 2024	Atlas Terra market registration.	Government order RD 11-229; composition is 42% molasses and 3.3% leonardite, with no sludge listed.
29 Aug 2024	Patent BG 67650 is granted.	Patent Office record; B1 publication 16 Sep 2024.
2024	Filed net sales reach BGN 247,000 and after-tax profit BGN 76,000, with no financing income reported that year.	Filed 2024 accounts.
18 Dec 2024	Atlas Terra Nitro and Amino registered.	Government orders RD 11-3280 and RD 11-3286.
20 Jan 2025	Nitro and Amino publicly launched.	Company announcement.
Jun 2025	Atlas Terra selected for EIT Food Test Farms 2025.	EIT Food selection announcement . Selection proves a planned validation process, not a positive result.
2025	Peer-reviewed rose paper is published using experiments performed in 2021–2022 with the early Atlas Universal formulation.	Bulgarian Journal of Agricultural Science 31(5):924–932.
13 Nov 2025	Atlas Terra application doses are broadened downward after field reports submitted to the regulator.	Government order RD 11-3400. Reports themselves are not public.
12 Mar 2026	Atlas becomes a partner of the “60 years Hristo Stoichkov” football initiative.	Independent event-organizer announcement ; marketing visibility, not agricultural validation.

Date	Event	Evidence and interpretation
Jun 2026	Major ownership and management change.	Current agreement: Nikolay Nikolaev Minkov 55%, Aleksandra Velkova 25%, Diya Dermendzhieva 10%, Georgi Beev 10%; Nikolay Nikolaev Minkov becomes manager; capital becomes EUR 500.
30 Aug 2026	Current cutoff.	All three direct ATC product pages show “out of stock.” 2025 financial statements are not yet publicly filed and are not yet overdue.

3. Founding, people and ownership

3.1 The scientific founders

Assoc. Prof. Dr. Diya Marinova Dermendzhieva is the clearest bridge between the pre-company research and the company. Her official Trakia University profile identifies her as a chemical engineer/ecologist whose teaching and research include water and environmental topics. University records connect her 2016 doctorate to wastewater and wastewater-treatment sludge. She is a named inventor on both the patent and the utility model, has held a continuous 10% legal equity interest since incorporation, and is a coauthor of the 2025 rose field paper. Her scientific competence and company interest are both material: the first supports technical credibility, while the second is a conflict that should have been visible in the paper’s disclosures.

Prof. Dr. Georgi Georgiev Beev is a microbiologist and ecologist at Trakia University. His official profile documents an MSc in ecology/modeling, a microbiology doctorate completed in 2009 and a university career beginning in the 2000s. He is co-inventor, has continuously held 10%, and is named as representative/responsible person in the 2021 waste-treatment decision. These facts support a genuine scientific team rather than a merely outsourced invention.

Official profiles are archived as EXT-018 and EXT-019. The Patent Office records and complete publications are in [registry/patent-office/](#) and [documents/by-name/](#).

3.2 Business founders and legal founders are not identical lists

The official site describes the startup idea as developed by Dermendzhieva and Beev, with business potential recognized by Nikolay Petrov Minkov, Aleksandra Velkova and Gabriela Minkova. The Registry Agency’s legal incorporation record is different: Mariana Minkova, Aleksandra Velkova, Nikolay Mitkov Mitkov, Diya Dermendzhieva and Georgi Beev were the shareholders, and Nikolay Mitkov was manager.

This does not automatically make the company story false—contributors do not need to be shareholders—but it is essential to distinguish:

- **legal founders/shareholders** shown in the deed;
- **narrative cofounders/business contributors** named in company material;
- **current management and ownership** after June 2026.

3.3 Do not conflate the Nikolays

The public record contains at least three identities that cannot responsibly be merged:

- **Nikolay Mitkov Mitkov** — original legal shareholder (20%) and first manager; exited in January 2022.
- **Nikolay Petrov Minkov** — named in the company history as a business-development cofounder and shown on the current team page in shortened form as “Nikolay Petrov,” financial director.

- **Nikolay Nikolaev Minkov** — current 55% owner and manager from June 2026.

The patronymics differ. No authoritative public record found in this research proves that Nikolay Petrov Minkov and Nikolay Nikolaev Minkov are the same person. The current team page also separately lists “Nikolay Minkov” in marketing and advertising. These may be stale, shortened or separate profiles, but the mismatch remains unresolved.

3.4 Ownership evolution

Effective public record	Mariana Minkova	Aleksandra Velkova	Nikolay Mitkov Mitkov	Elizabet Petrova	Nikolay Nikolaev Minkov	Diya Dermendzhieva	Georgi Beev	Manager
Oct 2019	30%	30%	20%	—	—	10%	10%	Nikolay Mitkov Mitkov
Apr 2021	30%	30%	20%	—	—	10%	10%	Aleksandra Velkova
Jan 2022	40%	30%	—	10%	—	10%	10%	Aleksandra Velkova
Feb 2023	45%	35%	—	—	—	10%	10%	Aleksandra Velkova
Jun 2026 current	—	25%	—	—	55%	10%	10%	Nikolay Nikolaev Minkov

The June 2026 agreement is economically concentrated but contains an unusual governance design: each named shareholder has one vote regardless of equity, ordinary General Meeting decisions require four-fifths of the listed shareholders, and capital changes require unanimity. On the document's face, the 55% economic owner therefore does not have unilateral general-meeting control. This is a document reading, not a Bulgarian legal opinion.

The current agreement uses EUR 500 capital, 100 shares of EUR 5. A Registry portal rendering still displays the scientists' old “100 BGN” values in one view; the signed agreement resolves the current intended amount as EUR 50 each. This is treated as a display/currency-conversion artifact, not as a second economic capitalization.

3.5 What is not public about management

No reliable public biography was found for current manager Nikolay Nikolaev Minkov. The company does not publish an independently verifiable management CV, headcount, organization chart, employment count or board. LinkedIn and jobs-directory snippets are retained only as leads and are not used as decisive evidence.

4. Technology and intellectual property

4.1 Patent BG 67650

The Bulgarian Patent Office public register records BG/P/2020/113066:

- title: “Method for conversion of sewage treatment sludge into a multicomponent liquid plant biostimulant”;
- filed: 17 January 2020;
- application publication: 30 July 2021;
- granted: 29 August 2024;
- B1 publication: 16 September 2024;

- owner: Atlas Agro Science Ltd.;
- inventors: Diya Dermendzhieva and Georgi Beev;
- current status: active;
- annual fee paid 15 April 2026 through 17 January 2027;
- stated expiry: 17 January 2040, if maintained.

The single claim describes, in simplified form, sludge at 40–65% moisture adjusted with potassium hydroxide to pH at least 14, sludge constituting at least 25% of the final substrate, dilution with water at 1:4, homogenization, 24–48 hours at 30–50°C, and neutralization with organic acid to pH 6.5–7.5. The complete B1 is archived as [documents/by-name/patent-BG-67650-B1.pdf](#).

4.2 Utility model BG 4083

Utility model BG/U/2020/5127 was filed on 14 October 2020, registered on 19 July 2021 and extended in February 2025 through 14 October 2027. It claims the liquid multicomponent biostimulant itself and provides a composition range including approximately 0.82–1% total nitrogen, 0.02–0.03% water-soluble P₂O₅, 0.2–0.3% water-soluble K₂O, 53–54% organic matter and 35–37% humic acids. The complete document is [documents/by-name/utility-model-BG-4083-U1.pdf](#).

4.3 What IP proves—and what it does not

The records prove ownership, filing/grant dates, claim scope and current fee status. They do not prove:

- field efficacy;
- product safety under every use condition;
- compliance with fertilizer-market rules;
- freedom to operate outside Bulgaria;
- commercial scale;
- that the current molasses/leonardite formulations practice the sludge claims.

Company materials that called the invention “patent pending” before August 2024 were chronologically accurate. Material implying a granted patent before that date was not. The 2025 academic paper inaccurately describes the patent/utility as “issued” on 17 January 2020; that was the patent filing date, not the grant date.

4.4 Trademark search

A direct owner search of the Bulgarian Patent Office public register on 30 August 2026 returned only the patent and utility model for “Атлас Агро Сайънс.” It returned no national mark owned by the company and no [Atlas Terra](#) national mark owned by it. A separate [ATLAS TERRA POWER](#) mark is owned by ТЕРА ПАУЪР ЕООД and should not be attributed to this company. No relevant public EUIPO/WIPO result was found in exact-name searches. This is a public-register result, not a formal trademark clearance opinion.

5. The early sludge-derived business

5.1 Origin and proposition

The initial proposition was circular-economy conversion of aged/composted municipal wastewater sludge into a liquid, humic-rich plant biostimulant. The technical and environmental logic was commercially appealing: divert sludge from disposal, recover nutrients and organic matter, and sell a higher-value input to landscaping and agriculture.

Historical material identifies [Atlas Universal](#) and, by May 2022, five variants:

- Atlas Aquapon;
- Atlas Flora;
- Atlas Grass;
- Atlas Green;
- Atlas Orchids.

Wayback captures are in [web-captures/wayback/](#). The site's corporate presentation and sludge strategy are linked under [documents/by-name/](#).

5.2 Prototype, planned capacity and authorized capacity are different facts

Company and program material described a prototype and at various times referred to 1 tonne/day and a hoped-for 25 tonnes/day. The 2021 environmental-screening proposal described an input of about 1 tonne/day. The actual waste registration authorized only **36.5 tonnes/year** of municipal wastewater sludge, waste code 19 08 05, at Hrishteni, with R12/R13/R03 operations. These numbers should never be presented as interchangeable operating capacity.

The environmental authority's 2021 decision concluded that a full environmental-impact assessment and separate compatibility assessment were not required for the proposed small installation. That is a procedural environmental decision—not a product-safety certification and not a permit to use sludge-derived product in agriculture.

The later Kazanlak municipal waste-plan appendix still lists the 2021 Atlas decision, but that only shows the authorization remained in a public plan; it does not prove the installation was operating in 2025 or 2026. No later expansion or amendment was found.

5.3 Actual early production and regulatory barrier

The most informative public source is an August 2023 [Economic.bg interview](#). Company representatives said, in substance:

- the team had spent roughly seven years on research and regulatory work;
- Bulgarian food-safety rules lacked a procedure for registering a fertilizer made from processed sewage sludge;
- the product could be used in landscaping but not agriculture;
- the company was not yet self-sustaining and was maintained with founders' other business income—described as an expensive hobby;
- development was financed with own funds and European programs;
- over the longer development period it had processed about 50 tonnes of sludge and produced more than 20 tonnes of biostimulant;
- the operation used only a small part of Stara Zagora's wastewater-sludge stream.

These admissions materially qualify earlier promotional capacity statements and later strategy targets. They are treated as high-value attributed evidence, though still not audited production data.

5.4 Municipal “partnerships” and Green Certificates

Municipal pages confirm Atlas activity in Bankya, Gabrovo and Nessebar, while company material also names Burgas, Pomorie, Primorsko and Sofia districts. The evidence supports product application, public demonstrations and relationships. It does not establish material paid contracts.

The **Green Certificate** was issued by Atlas Agro Science itself. It is a promotional recognition, not a regulator or third-party environmental certification. Invest Sofia’s memorandum and announcements say products were donated/free in several Sofia locations, which means at least some “partnership” references were community promotion rather than revenue. The Nessebar page describes cooperation and possible future projects without price, volume or contract.

No exact-name public-procurement award, contract value or municipal payment evidence was found. This does not prove no contract exists; it means municipal logos and certificates cannot be converted into revenue assumptions.

6. The pivot to current agricultural products

6.1 The company’s own acknowledgement

The current agriculture page acknowledges that sludge-derived material remained strictly prohibited for agricultural use and says the company created a product without compromising before regulators. The regulator’s signed product orders then identify molasses, leonardite and—in Amino—free amino acids. No sewage sludge appears in the listed current compositions.

The evidence therefore supports this interpretation:

1. the company retained its circular-economy narrative, scientific team and sludge IP;
2. it did not achieve agricultural registration of the sludge formulation;
3. it launched a different regulator-compatible feedstock/formulation family;
4. it markets the new family as developed through its “patented technology,” but public records do not demonstrate how a sludge-conversion claim is practiced by molasses/leonardite products.

That linkage is a diligence question, not an established technical continuity.

6.2 Registered current portfolio

The product-specific orders are government documents mirrored publicly by an agricultural reseller and cross-checked against the official 2026 national register. They authorize market placement and use; they do not independently certify every promotional performance statement.

Prod uct	Registration	Regulatory class	Declared organic base	Selected composition	Current authorized dose
Atlas Terra	RD 11-229, 31 Jan 2024; amended RD 11- 3400, 13 Nov 2025	Organic fertilizer in the table; a later line calls it “microbial fertilizer,” apparently a clerical inconsistency	42% molasses; 3.3% leonardite	N 2.58%; P 0.05%; K 6.11%; water-soluble K2O 5.23%; Fe 0.23%; pH 5.5	Foliar 100–300 ml/daa; soil 100–500; fertigation 100– 300. Do not mix with chlorine-containing products.

Product	Registration	Regulatory class	Declared organic base	Selected composition	Current authorized dose
Atlas Terra Nitro	RD 11-3280, 18 Dec 2024	Organo-mineral fertilizer	Organic matter 84.8%, molasses and leonardite	N 11.6%; nitrate N 1.75%; ammonium N 0.96%; humic acids about 16.4%; water-soluble sulfur 6.55%; pH 5.5	Foliar 200–400 ml/daa; soil 200–500.
Atlas Terra Amino	RD 11-3286, 18 Dec 2024	Organo-mineral fertilizer	Organic matter 88.2%, molasses, leonardite and free amino acids	N 13.5%; 20 free amino acids totaling 34.76%; humic acids about 17.69%; water-soluble sulfur 8.24%; pH 5.5	Foliar 150–500 ml/daa; soil 200–500; seed 25–50 ml/100 kg seed.

daa is decare, the Bulgarian unit equal to 1,000 m².

6.3 Public-document inconsistencies

Several discrepancies matter operationally:

- The company agriculture page still shows Atlas Terra's original 300/500/300 ml/daa fixed doses, not the November 2025 lower ranges. The ATC distributor page reflects the amended range.
- The company page says Nitro foliar use is 300–500 ml/daa; the signed order says 200–400.
- The company/distributor describes Amino as having a 46.9% “amino-acid complex”; the regulator lists 34.76% free amino acids. A broader complex could differ from free-amino-acid content, but the marketing wording does not explain the distinction.
- The website adds Terra values such as 84.4% organic matter and 26.3% humic acids that are not stated in the original RD 11-229 table. They may come from a label/test, but the supporting public report was not found.
- RD 11-229's table calls Terra an organic fertilizer while a later administrative sentence calls it microbial. The listed base is molasses/leonardite and no microbial active is specified, so this looks like a clerical carry-over; the report does not silently “correct” the signed document.

For use decisions, the current signed orders and label supplied with the product should take precedence over the stale web copy.

6.4 Eco-scheme claims

Company and reseller pages use formulations such as “registered for ecological agriculture,” “eco-scheme 3,” and “using it makes you a legitimate candidate.” The Ministry's eco-scheme does include eligible fertilizer/soil-improver/biologically active categories. However, payment depends on eligible hectares, practices, documentation and the campaign rules. Registration of an input does not by itself guarantee a subsidy or certify that harvested food is “organic.”

This distinction is commercially important because the eco-scheme is a real demand driver—2023 payments totaled BGN 107.673 million to 3,657 farmers—but it is not an automatic product rebate. The 2025 campaign rate announced in May 2026 was EUR 17/ha.

6.5 Additional products in the national register

The 846-page register places Atlas Terra near separate registrations for Petro 330 Special and three Tecnokel Amino products. PDF text extraction visually interleaves rows and can misleadingly make them look like an Atlas portfolio. Page/row reconstruction shows those products are associated with other holders/manufacturers (including AGRIGES, AgriTecno and Agriya), not Atlas Agro Science. Only Atlas Terra, Nitro and Amino are attributed here to Atlas.

7. Scientific and field evidence

7.1 Published rose study

The one public peer-reviewed crop paper found is Veselina Badzhelova, Roksana Mineva and Diyana Dermendzhieva, “Influence of the application of the organic biostimulator Atlas Universal on the economic characteristics of the oil-bearing rose,” *Bulgarian Journal of Agricultural Science* 31(5), 2025, pp. 924–932. The full paper is archived as [documents/by-name/peer-reviewed-rose-field-study-2025.pdf](#).

The experiments occurred in 2021–2022 on a 16-year-old, non-irrigated *Rosa damascena* plantation in the Kazanlak Valley. The design used seven Atlas treatments and one untreated control, with five plants per variant on long plots. The authors report, among other results, that variant I—2 L/ha foliar plus 50 L/ha soil application—produced 27% higher flower yield and 33% higher essential-oil yield than the control. The aggregate Atlas-treated group is reported as increasing buds by 39.9%, flower yield by 35.4% and essential oil by 16.8%. The authors themselves recommend longer validation.

7.2 Limitations and conflict

The study is useful early evidence, but it is not a definitive efficacy trial:

- single site;
- only two seasons;
- five plants per treatment variant;
- one untreated control and long-plot arrangement;
- limited evidence of randomized replicated blocks, blinding or multi-location validation;
- likely vulnerability to plot and pseudoreplication effects;
- no public raw dataset or preregistered protocol found.

Most importantly, coauthor Dermendzhieva is a named inventor and 10% shareholder of Atlas Agro Science. The paper declares no financial or nonfinancial competing interests and no funding. That makes the public disclosure incomplete even if the authors believed no formal conflict existed. Results should be replicated by an independent team.

7.3 The paper does not validate the current products

The study tested the earlier sludge-derived [Atlas Universal](#), not the current molasses/leonardite [Atlas Terra](#), [Nitro](#) or [Amino](#). The formulations cannot be assumed equivalent.

There is also a notable composition conflict. The paper reports Atlas Universal at approximately:

- N 61,593.3 mg/L (about 6.159% w/v);
- P2O5 17,124.2 mg/L (about 1.712% w/v);
- K2O 1,245.4 mg/L (about 0.1245% w/v);
- humic acids 35.1%.

The utility-model claim instead specifies approximately N 0.82–1%, P2O5 0.02–0.03%, K2O 0.2–0.3% and humic acids 35–37%. Density/basis differences do not obviously explain the nitrogen and phosphorus gaps. Possible explanations include reformulation, analytical/reporting basis or transcription error, but no public source resolves it.

7.4 EIT Food Test Farms 2025

EIT Food selected Atlas Terra for its 2025 Test Farms cohort. The [selection announcement](#) says participants would validate technologies on real farms and present to the market between November and February. The [portfolio page](#) repeats Atlas performance claims, but these are cohort descriptions, not published trial results.

Searches through the cutoff found no Atlas-specific protocol, crop/site, comparator, data table, final presentation or outcome report. Selection is positive evidence of third-party program acceptance and intended testing; it is not proof that the claims succeeded.

7.5 Regulator-submitted field reports

The November 2025 Atlas Terra amendment refers to field reports supplied in support of lower doses. Those reports are not attached to the public order and were not found separately. They are evidence that the regulator reviewed a dose-change submission, but their methodology and results cannot be independently assessed.

7.6 Unsupported or incompletely supported marketing propositions

No independent public study was found that establishes for the current formulations:

- a 50% reduction in nitrogen-fertilizer requirement;
- general yield improvement across crops;
- improved herbicide, insecticide and fungicide efficacy;
- universal compatibility with plant-protection products;
- carbon-footprint reduction quantities;
- “100% safe” behavior across soils, crops, operators and ecosystems;
- organic-food status from product use;
- a general reduction in disease.

These may be testable hypotheses or customer observations. They are not established public facts.

8. Commercial model, distribution and pricing

8.1 Route to market

Atlas’s agriculture page says exclusive sales rights for Atlas Terra and derivative products were granted to ATC Agro Finance, described as created by and part of the structure. The current ATC site sells the three products and bundles agronomic support, analysis, drone application, financing and insurance-style offers.

Official Registry Agency records show ATC Agro Finance is not a legal subsidiary of Atlas Agro Science:

- ATC Agro Finance, UIC 206519096, was founded in May 2021;
- manager: Ivaylo Petrov Minkov;
- owners: All Tax Consulting 60%, Ivaylo Petrov Minkov 40%;
- All Tax Consulting, UIC 204899251, is itself owned 50/50 by Ivaylo Petrov Minkov and Monika Ventsislavova Minkova.

The phrase “part of the structure” should therefore be read as an affiliated or contractual commercial relationship, not corporate ownership by Atlas. Shared surnames may suggest personal connections, but this research does not infer family relationships without evidence.

8.2 Current offered services

ATC advertises quantity-linked packages:

- **Start** at 60–160 L: soil analysis, interpretation and application recommendation;
- **Grow** at 160–300 L: adds water analysis, technology adaptation and agronomic consultation;
- **MAX** above 300 L: adds leaf analysis, crop-quality analysis, seasonal monitoring and a final effectiveness report.

Additional offers include drone treatment, financing, insurance and promotional 0% financing. These are current commercial descriptions, not evidence that each service is routinely delivered or economically profitable.

8.3 Public pricing at the cutoff

The following prices were shown by ATC on 30 August 2026:

Product	5 L retail, VAT included	20 L tier, price/L excluding VAT	1,000+ L tier, price/L excluding VAT
Atlas Terra	EUR 72.90	EUR 10.74	EUR 8.69
Atlas Terra Nitro	EUR 82.20	EUR 12.27	EUR 10.23
Atlas Terra Amino	EUR 91.20	EUR 13.80	EUR 11.76

Indicative 20 L-tier product cost per decare, before VAT and application/service costs:

Product/use	Authorized dose	Product cost/daa
Terra, foliar or fertigation	100–300 ml	EUR 1.07–3.22
Terra, soil	100–500 ml	EUR 1.07–5.37
Nitro, foliar	200–400 ml	EUR 2.45–4.91
Nitro, soil	200–500 ml	EUR 2.45–6.14
Amino, foliar	150–500 ml	EUR 2.07–6.90
Amino, soil	200–500 ml	EUR 2.76–6.90
Amino, seed	25–50 ml/100 kg	EUR 0.35–0.69 per 100 kg seed

All three direct ATC product pages displayed **Изчерпан** —out of stock—on the cutoff date. This could reflect inventory, ecommerce administration or channel strategy; it is not proof production stopped. It is nevertheless a current conversion and execution risk.

8.4 Illustrative competitor context

Bulgarian biostimulant products are heterogeneous, so price comparison is not a market-share ranking. A February 2026 AgroAktiv list indexed:

- IIsamin N90, 54% amino acids / 10% free amino acids: EUR 13.60/L in 20 L, 100–150 ml/daa;
- Mister X, 29% amino acids: EUR 7.00/L, 100–300 ml/daa;
- Number One: EUR 14.20/L, 100–300 ml/daa.

Other captured retail examples included StimAK 5 L at EUR 60, Nutrileaf NPK plus 5% amino acids 5 L at EUR 100, and Terra Aquatica Humic 5 L up to EUR 95.10. Atlas Amino's EUR 13.80/L 20 L rate sits inside the observed specialty-product range, but composition, dose, package and channel differ. The failed origin download of the AgroAktiv list is explicitly logged, so its values are treated as lower-confidence context.

9. Financial development

All figures below are from the company's filed annual statements and are in BGN thousands.

Year	Net sales	Financing/other operating income	Total income	Total expenses	Tax	After-tax profit/(loss)	Year-end assets	Equity	Liabilities	Deferred financing
2021	6	0	6	7	0	(1)	54	11	0	43
2022	64	46	110	46	6	58	73	69	4	0
2023	149	123	272	296	0	(24)	63	45	1	17
2024	247	0	247	163	8	76	165	121	27	17

The 2024 balance sheet comprises BGN 15,000 fixed assets and BGN 150,000 current assets, including BGN 126,000 receivables and BGN 24,000 cash. Net sales are classified under manufacture of chemical products and as product revenue.

Interpretation

- 2021 was pre-commercial and substantially grant/deferred-financing supported.
- 2022 was profitable because financing income was 42% of total income.
- 2023 sales more than doubled, but financing income was still 45% of income and total expenses produced a BGN 24,000 loss.
- 2024 is the first filed year in which the company shows both its highest sales and profit without current-year financing income in the income statement.
- Receivables rising to BGN 126,000—about 51% of annual sales—make cash collection and customer quality important diligence topics.
- Absolute scale remains very small. The accounts do not disclose product-by-product revenue, units, gross margin, customer count, exports or related-party sales.

The 2025 annual financial statement was not public by 30 August 2026. The Bulgarian deadline was 30 September 2026, so absence is not delinquency.

10. Funding, accelerators and awards

10.1 EIT Food RIS Innovation Prizes 2020

Atlas won the Bulgarian national final and audience award, with published amounts of EUR 5,000 and EUR 2,000, and became an international finalist. The official [EIT Grand Final results](#) name SoluBlue, Microbe+ and Thermosolar Hive as the international winners. A contemporary promotional article saying Atlas won the international final is therefore wrong.

10.2 EIT Climate-KIC and Cleantech Bulgaria

Program decks and startup materials show Atlas participated in the EIT Climate-KIC Accelerator ecosystem through Cleantech Bulgaria and received accelerator support/funding. No authoritative public amount or contract was found. This is recorded as supported participation, not quantified funding.

10.3 Norway Grants

Atlas's detailed public disclosure identifies:

- project: "Innovative multicomponent plant biostimulant from wastewater sludge";
- contract: 2021/335111, signed 22 July 2022;
- period: 1 August 2022–31 October 2023;
- total budget: EUR 92,661;
- grant: EUR 78,700, or 85%;
- activities: methodology testing, consumer-acceptance preparation, marketing strategy, end-user tests, management, audit and publicity.

The disclosure is unusually specific and financing income in the filed accounts is directionally consistent with a grant-funded project. However, the official program's public project database record was not located, so the exact accounting mapping is not asserted.

10.4 Awards and ecosystem relationships

The Applied Research and Communications Fund's 2021 annual report confirms Green Innovation recognition for Atlas. Invest Sofia signed a cooperation memorandum in 2022, and event records place Atlas at AGRA 2025 and BATA Agro. These facts show visibility and ecosystem access. They do not prove product adoption, sales, investment or exclusive partnerships.

10.5 Sponsorship

The March 2026 Hristo Stoichkov initiative relationship is current evidence that the company is spending or contributing toward general brand visibility. Terms and value are not public. It is categorized as a marketing partnership rather than agronomic evidence.

11. Market context and addressable opportunity

The Bulgarian National Statistical Institute's final 2024 economic accounts for agriculture report:

- BGN 5.7 billion total agricultural intermediate consumption;
- BGN 950.1 million expenditure on fertilizers and soil improvers;
- fertilizer/soil-improver value down 17.6% year on year, with a price index of 100.9, volume index 81.7 and value index 82.4.

Eurostat's 2024 fertilizer-use series records Bulgaria at approximately 319,299 tonnes of inorganic nitrogen and 30,647.2 tonnes of phosphorus fertilizers. At EU level, 2024 mineral-fertilizer consumption was approximately 9.8 million tonnes, including 8.9 million tonnes nitrogen and 0.9 million tonnes phosphorus.

These figures demonstrate a large incumbent mineral-input market and sensitivity to farm economics. They are not Atlas's serviceable obtainable market. Atlas sells specialty liquid inputs at per-decare doses and competes with many domestic and imported products; the official national register spans 846 pages.

Scale comparison

Atlas's BGN 247,000 2024 net sales equal about **0.026%** of the broad BGN 950.1 million fertilizer-and-soil-improver spend. This is only an upper-bound scale illustration because the denominator is broader than Atlas's category.

The company's strategy document targets 100 tonnes/year of finished product and 10% of the domestic market, without defining the market denominator or date. If "10%" meant the broad NSI category, it would imply about BGN 95 million of annual value—roughly 385 times the company's 2024 sales. The strategy is therefore an aspiration, not a forecast supported by the public financial trajectory.

Market tailwinds

- high fertilizer cost and price volatility;
- EU pressure to improve nutrient-use efficiency and soil health;
- Bulgarian eco-scheme spending for environmentally oriented practices;
- interest in humic, amino-acid and organo-mineral specialty inputs;
- farms seeking agronomic support bundled with products.

Market headwinds

- highly fragmented product register and intense price/performance competition;
- mineral fertilizers remain dominant and agronomically essential;
- growers require crop-specific proof and economic payback;
- weather makes field evidence noisy and expensive;
- organic/eco language is regulated and easily overclaimed;
- current Atlas evidence does not yet establish multi-crop, multi-site performance.

12. Claims classification: fact, supported claim and marketing

Verified or strongly supported

- Company incorporated 2 October 2019; ownership and managers as shown in Registry Agency deeds.

- Patent BG 67650 and utility model BG 4083 are active on the cutoff date.
- Dermendzhieva and Beev are the inventors and scientific shareholders.
- Hrishteni environmental screening and 36.5 t/year waste authorization were issued in 2021.
- Atlas Terra, Nitro and Amino have Bulgarian market-use registrations.
- Current formulations list molasses/leonardite rather than sludge.
- Filed 2021–2024 financial figures.
- Norway Grants project details as published by the beneficiary.
- National EIT Food award/finalist status, Green Innovation recognition and 2025 Test Farms selection.
- One peer-reviewed early-product rose study exists.

Supported but commercially unquantified

- municipal product use and public landscaping cooperation;
- accelerator participation;
- current ATC distribution relationship and service packages;
- trade-fair participation;
- regulator reviewed field reports for the 2025 Terra dose amendment;
- Stoichkov-initiative partnership.

Marketing or unproven performance claims

- “cuts nitrogen fertilizer use in half”;
- guaranteed high yield or ecologically healthy production;
- improved efficacy of herbicides, insecticides and fungicides;
- automatic eco-scheme entitlement;
- “100% safe,” “zero emissions,” universal compatibility, or broad carbon-reduction claims;
- equivalence of current Terra products to the sludge patent;
- 10% domestic market target;
- municipal “partnership” as proof of commercial revenue;
- EIT Test Farms selection as proof of a successful trial.

13. Adversarial due-diligence assessment

13.1 Strongest skeptical case

A skeptical reader could argue that Atlas spent years developing a sludge product that could not be registered for agriculture, survived with founder and grant support, then pivoted to conventional organic inputs while preserving the more distinctive patented-sludge story in its branding. The only published crop paper tests the old product, contains an undisclosed shareholder conflict and is methodologically narrow. Current sales are tiny, distributor inventory is unavailable online, current trial results are unpublished, and web copy overstates regulatory and performance implications.

That skeptical case is substantially supported by the evidence.

13.2 Strongest favorable case

A favorable reader could argue that early-stage circular-biotechnology commercialization is genuinely difficult; Atlas developed protectable IP, obtained permits and scientific results, candidly confronted a regulatory dead end, reformulated into registerable products, more than quadrupled sales from 2022 to 2024, achieved a profitable non-grant-heavy year, retained the scientific founders, added new products and distribution services, and secured respected validation opportunities.

That favorable case is also substantially supported.

13.3 Reconciliation

Both cases are true because the company is neither a fabricated venture nor a proven scale business. The investment/commercial question is whether the second chapter can develop its own independent proof and repeatable sales engine rather than borrowing credibility from the first chapter's patent and science.

13.4 Highest-priority primary diligence requests

Any serious investor, distributor, customer or partner should request:

1. 2025 management accounts and filed GFO when available; 2026 year-to-date sales, gross margin, cash and receivables aging.
2. Product-level units, ASP, margin and returns; top-ten customers; related-party sales; repeat-purchase cohorts; cancellations and bad debt.
3. The exclusive ATC agreement, pricing governance, sales targets, termination rights, IP/brand rights and related-party disclosures.
4. Current inventory, production location, batch capacity, toll-manufacturing arrangements, raw-material suppliers and quality-control release records.
5. Labels, safety data sheets, certificates of analysis, contaminant/heavy-metal and microbiological testing, stability and shelf-life data for each product.
6. The field reports used for RD 11-3400 and the complete EIT Test Farms protocol/results.
7. Independent randomized, replicated, multi-site trials for Terra, Nitro and Amino, including conventional-fertilizer comparators and farm-economics analysis.
8. A technical claim chart explaining whether and how current formulations practice BG 67650/BG 4083, or a clear statement that they do not.
9. Patent-maintenance plan, foreign-filing status and any freedom-to-operate analysis.
10. Confirmation of the Hrishteni permit's current operational status, quantities processed and whether sludge-derived production continues at all.
11. Clarification of founders' identities, current management biographies, headcount and the June 2026 ownership transaction rationale.
12. Evidence supporting eco-scheme, 50% nitrogen reduction, pesticide-efficacy, carbon and safety marketing language; legal review of current web copy.

14. Residual unknowns and research limits

After repeated gap searches, the following remain unavailable or unresolved in public sources:

- 2025 financial statements—not due until after the cutoff;

- current manufacturing site/capacity and actual 2025–2026 production volumes;
- customer names, contracts, procurement awards, exports, repeat rate and backlog;
- ATC exclusivity contract and related-party economics;
- current inventory reason and restock timing;
- EIT 2025 trial results and regulator-submitted dose reports;
- labels/SDS/COAs and contaminant/shelf-life data;
- current operational status of the Hrishteni sludge site;
- whether current products use the patented method;
- reliable biography of current manager Nikolay Nikolaev Minkov;
- identity relationship, if any, between Nikolay Petrov Minkov and Nikolay Nikolaev Minkov;
- amount of EIT Climate-KIC funding;
- formal national trademark ownership for the Atlas/Atlas Terra branding;
- independent evidence behind broad performance, safety and carbon claims.

These are disclosure limits, not uncompleted public-research tasks. Each has been converted into a primary-diligence request rather than filled with inference.

15. Source method and reliability

Research prioritized:

1. statutory/official records: Registry Agency deeds and filings, Patent Office records, signed government orders, environmental/waste decisions and national statistics;
2. official institutional sources: Trakia University, EIT, ministries, municipalities, NSI and Eurostat;
3. peer-reviewed and independent reporting;
4. company/distributor pages for attributable claims, offerings and prices;
5. search-indexed snippets only when the origin file was unavailable, explicitly downgraded.

The live company site was crawled from both sitemaps: 89 pages were archived with normalized text. The Wayback CDX index contains 1,302 capture rows, with selected 2020–2026 snapshots stored locally. PDFs are content-hashed; human-friendly links are symbolic links to avoid binary duplication. Exact duplicate hashes and invalid captures are recorded in the manifests.

The source-by-source classification, claim ledger and adversarial loops are separate files under `analysis/`.

Appendix A — Principal public sources

Company and distribution

- [Atlas Agro Science home](#)
- [Company history and team](#)
- [Agriculture/current products](#)
- [Atlas Terra product page](#)

- [Norway Grants disclosure](#)
- [ATC Agro Finance product catalogue](#)
- [ATC services](#)

Official/company registry and IP

- [Bulgarian Registry Agency active-condition report](#)
- [Bulgarian Patent Office public registers](#)
- [Corporate presentation PDF](#)
- [Sludge strategy PDF](#)

Regulation and environment

- [Stara Zagora municipality EIA notice](#)
- [Current Bulgarian fertilizer/biostimulant register](#)
- [Atlas Terra 2025 dose amendment mirror](#)

Science, founders and innovation programs

- [Trakia University — Diya Dermendzhieva profile](#)
- [Trakia University — Georgi Beev profile](#)
- [EIT Food 2025 Test Farms selection](#)
- [EIT Food 2025 portfolio](#)
- [Official EIT Food RIS Innovation Prizes 2020 Grand Final results](#)
- [Applied Research and Communications Fund 2021 annual report](#)

Independent reporting, municipalities and market

- [Economic.bg: how waste becomes a useful product](#)
- [Invest Sofia cooperation memorandum](#)
- [Bankya municipal product-use page](#)
- [Gabrovo municipal product-use page](#)
- [Nessebar Green Certificate page](#)
- [NSI 2024 final economic accounts for agriculture](#)
- [Eurostat 2024 mineral-fertilizer consumption](#)
- [Bulgarian Ministry eco-scheme 2023 payment](#)
- [Bulgarian Ministry 2025 campaign rate](#)

Appendix B — Key conclusions by confidence

Conclusion	Confidence	Why
The company and legal/financial trajectory are correctly identified.	High	Direct Registry Agency deeds and filed accounts.

Conclusion	Confidence	Why
Sludge IP is genuine, current and company-owned.	High	Direct Patent Office records and full publications.
Current registered products use molasses/leonardite bases, not disclosed sludge.	High	Signed product orders and official register.
The company pivoted because agricultural sludge registration was blocked.	High	Company admission, current page and product orders converge.
Current products are commercially selling at some level.	High for 2024; medium thereafter	Filed 2024 product sales; current prices/pages, but no 2025 accounts or volumes.
Current formulations deliver broad claimed agronomic results.	Low	No independent current-formulation study found.
Municipal relationships generated material revenue.	Low	Use/donation evidence, no contracts or payments.
EIT 2025 trials succeeded.	Unknown	Selection only; no result published.
ATC is an Atlas subsidiary.	False as a legal-ownership statement	Official deeds show separate owners.
The current 55% owner is the same person as narrative cofounder Nikolay Petrov Minkov.	Unknown	Different patronymics; no authoritative link found.

Prepared from public sources. Archived copies, extracted text, manifests and claim-level evidence accompany this report.