urban-gro, Inc.

United States / AgTech
Nasdaq
Bloomberg: UGRO US
ISIN: US91704K2024

Initiation of coverage

RATING	**BUY**
PRICE TARGET	**$ 7.00**
Return Potential	476.8%
Risk Rating	High

INDOOR GROWING IS TAKING ROOT

We start coverage of urban-gro (UG) with a Buy rating and $7 target price. The company is an integrated professional services and design-build firm offering solutions to the Controlled Environment Agriculture (CEA) and commercial sectors. The company has a wealth of experience including >1k CEA projects. We think UG's growth prospects are excellent, given its focus on the still emerging cannabis and vertical farming (VF) industries. A pair of strategic acquisitions to broaden expertise and fulfil its turnkey vision, a full backlog, and ample liquidity has the company poised to grow its topline and restore profitability. We reckon investors are overlooking the positives emerging from the newly strengthened product offering and misunderstand urban-gro's financing needs.

Plenty of reasons to be positive We like UG for several reasons: (1) a service portfolio and CEA expertise virtually unmatched in depth, covering architecture, design, engineering, horticulture, and project management; (2) a one-stop shop for clients; (3) turnkey offerings that allow UG to win larger contracts; (4) improving sector diversification; (5) a stable debt-free capital structure (Q1/23: net cash of $4.4m; cash of $7.3m) with low CapEx and working capital requirements; and (6) its foothold in the realising European CEA market.

Full ownership of the end-to-end process Constructing indoor grow facilities is hard—orchestrating the end-to-end design, equipping, and build processes even more so. Having started with lighting in 2014, UG learned early on just how difficult it is to get CEA right without full start-to-finish input. Aided by years of experience in figuring out what works and what doesn't, urban-gro has since forged the expertise in the key steps for turnkey CEA solutions for cultivators.

Business diversification kicking in Lately, US cannabis has been held back by delays in licenses being awarded. Management thus shifted staff resources towards commercial projects, such as healthcare and consumer packaged goods. This flexibility led to a ~70% non-CEA topline contribution in Q1. (p.t.o.)

FINANCIAL HISTORY & PROJECTIONS

	2020	2021	2022	2023E	2024E	2025E
Revenue ($m)	25.84	62.11	67.03	97.19	129.59	171.41
Y/Y growth	6.8%	140.4%	7.9%	45.0%	33.3%	32.0%
AEBITDA* ($m)	-0.65	2.68	-3.90	-3.01	0.27	2.99
AEBITDA margin	-2.5%	4.3%	-5.8%	-3.1%	0.2%	1.7%
Net income ($m)	-5.07	-0.88	-15.28	-8.11	-4.60	-2.80
EPS (diluted) ($)	-1.06	-0.09	-1.44	-0.81	-0.46	-0.28
DPS ($)	0.00	0.00	0.00	0.00	0.00	0.00
FCF ($m)	-3.81	-9.90	-17.06	-5.26	-1.65	0.82
Net gearing	-83.7%	-71.8%	-23.5%	-22.5%	-18.0%	-20.6%
Liquid assets ($m)	0.18	34.59	12.01	6.56	4.91	5.74

** adjusted EBITDA*

RISKS

Risks include but aren't limited to regulatory, financing and market cyclicality, particularly in the cannabis sector.

COMPANY PROFILE

urban-gro, Inc is a provider of professional turnkey facility services to the CEA industry and various commercial sectors. Headquartered in Denver, Colorado, the company now operates six offices across North American and one in Europe. Operations are executed by a staff numbering 140 employees.

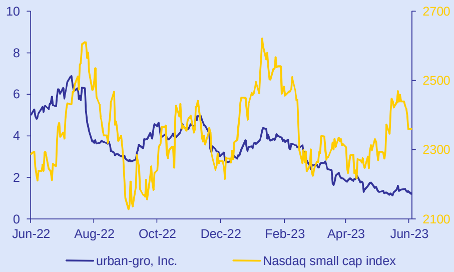
MARKET DATA

As of 26 Jun 2023

Closing Price	$ 1.21
Shares outstanding	10.94m
Market Capitalisation	$ 13.28m
52-week Range	$ 1.13 / 6.87
Avg. Volume (12 Months)	69,625

Multiples	2022	2023E	2024E
P/E	n.a.	n.a.	n.a.
EV/Sales	0.1	0.1	0.1
EV/AEBITDA	n.a.	n.a.	33.4
Div. Yield	0.0%	0.0%	0.0%

STOCK OVERVIEW



COMPANY DATA

As of 31 Mar 2023

Liquid Assets	$ 7.33m
Current Assets	$ 36.90m
Intangible Assets	$ 5.14m
Total Assets	$ 64.09m
Current Liabilities	$ 30.90m
Shareholders' Equity	$ 30.26m

SHAREHOLDERS

Insiders	28.9%
Institutional Holdings	28.0%
Free Float	43.1%

Analyst: Ellis Acklin, Tel. +49 (0)30 - 80 93 96 83

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INVESTMENT CASE

Indoor growing is taking root

urban-gro finds itself at the vanguard of the indoor farming industry with its end-to-end design, equip, and construction solutions. The company pursues a “single-point-of-responsibility” strategy for its cannabis- & VF-based CEA services and was an early mover in the turnkey segment. A strong growth trajectory in the cannabis industry was interrupted by the consumer come down from pandemic highs supercharged by subsidy checks and seclusion anxieties, but UG has been able to absorb the slowdown without severe long-term effects on its balance sheet. In the meantime, the company has shifted into facility construction and is also leveraging its workforce across commercial sectors (non-CEA). The latter has helped offset recent CEA volatility. We now believe UG is poised for a strong business recovery with the order backlog trending higher (Q1: +477% Y/Y) and its expansion across international frontiers.

Pot is no longer just for stoners and long-haired rock and roll fans

The moral panics over cannabis that gripped America at various points in the 20th century seem quaint today, as weed shops pop up around the country. President Biden even pardoned people convicted of marijuana possession by the federal government. Americans are increasingly turning to medical marijuana to treat various ailments and shelled out some $10.7bn for cannabis products in 2022. Today, 38 US states permit medical cannabis, and 21 have legalised recreational consumption. Market watcher, Brightfield Group, sees the overall American market topping $51bn in 2028 underpinned by a 10% CAGR (2023 to 2028). Lately, business has been held back by delays in licenses being awarded—in some cases, even in states that have already legalised pot. But we see ample opportunity in UG’s home market, once this gridlock clears. UG also has a new office and boots on the ground in liberalising Europe, where analysts are calling for a double digit CAGR for the next five years.

Feeding the world is becoming a problem and VF can help

Demand for food is soaring at a time when supply is constrained by insufficient land and farming inputs—chiefly water. The world population is expected to swell to 9.7bn people by 2050 according to McKinsey, a consultant. Moreover, growing urbanisation trends point to 7 of 10 humans living in cities by that time. Vertical farming (VF), the indoor cultivation of plants and produce, has emerged as a viable solution to help feed city dwellers and ease environmental strain. urban-gro’s CEA expertise is ideally suited for vertical farming, which shares similar systems and processes with cannabis grow facilities. VF is just starting to take off and represents an immaterial portion of UG’s business right now. Nevertheless, we regard produce-based CEA as a highly promising mid- to long-term growth driver to augment the company’s weed-based CEA operations.

Good potential for a rebound in profitability

The last twelve months have been largely shaped by UG’s entrance into Construction Design-build with its latest M&A deals. Core Equipment Systems activities took a hit in H2/22 on dialled down CapEx budgets for cultivators in a softening cannabis market, while several large projects in the backlog are idling because of licensing red tape. The order backlog topped $105m in Q1 with more large contracts in the works. We look for 2023 revenue to approach $100m (Guidance: $100m to $120m). The increasing topline combined with a more efficient operating structure provides scale effects and a viable path to profitability. We also expect an upswing in the CapEx cycle and equipment spend. These factors should help AEBITDA approach break-even in the back half of 2023 and turn positive in 2024.

Markets have UG in the financial sin bin

We reckon the markets are overstating urban-gro's financial risk. The company exited Q1 with net cash of $4.4m equal to $0.41 per share, thanks in part to a $2.4m cash settlement that helped offset operating losses in the January-to-March period. Although the lack of profitability has remained a troubling factor, we believe operations are turning the corner, which should help cash flows grow this year. Plus, after speaking with UG's financial boss, we see scope to pare down high account receivables (AR) in the coming quarters and for working capital pressure to generally ease. As long as the company succeeds in boosting profitably this year (AEBITDA guidance $-3m to break even), we do not think management will need to tap the capital markets for new liquidity.

Share is attractively valued

We use a discounted cash flow method to value UG and start coverage with a Buy rating and $7 target price. We like the company for its overall business approach and positioning in the CEA industries and commercial sectors. The company used corporate activity last year to fill in missing pieces required to realise its single-point-of-responsibility vision for cultivators. But the business is not well understood, and UG has shed some 50% of its market cap YTD on its exposure to a cooling cannabis market and recent liquidity concerns. In our view, investors are overlooking the positive shifts in the business, and we think the current valuation greatly understates UG's potential.

SWOT ANALYSIS

STRENGTHS

- **Step up into the turnkey weight class** In the course of a flurry of corporate activity in 2021 and 2022 (overleaf), the company onboarded some key missing steps in the turnkey value chain and can now take on increasingly larger and more profitable projects.
- **One-stop shop** The company now commands a broad services portfolio that can be deployed on a turnkey, or *à la carte* basis. Importantly, UG covers all the key steps in CEA and can act as a single-point-of-contact in orchestrating projects. This saves clients time and money, and also helps them avoid mistakes.
- **CEA is hard; but experience counts** CEA involves a dizzying array of technology, systems, and processes that have to operate in concert at all times for crops to thrive. UG has methodically brought the various CEA steps under one roof over the years and can now lean on experience covering over 1k projects.
- **Broad network** The company has solid relationships with manufacturers of commercial horticulture lighting solutions; rolling and automated container benching systems, specialty fans, fertigation / irrigation systems, environmental control systems, as well as microbial mitigation and odour reduction systems.
- **European presence** urban-gro now has a well-staffed office in the Netherlands, spearheaded by Arie Kamp, who boasts over 25 years of combined agriculture, technology, and sales experience.

WEAKNESSES

- **High exposure to cannabis** UG is working to extend market reach into produce-based CEA and commercial spaces. However, most of the company's business remains highly exposed to trends in cannabis. Weak weed demand could have a major impact on revenue growth and profit potential.
- **Low stock market clout** urban-gro is a stock market newcomer (IPO February 2021) with a small market cap and often misunderstood business model. Plus, the sector has been under heavy pressure. Large chunks of peer market caps have vanished this year with investors dumping positions exposed to cannabis.
- **Dependence on essential staff** The company has worked hard to build up the expertise required to offer turnkey solutions. The loss of vital staff members could compromise its ability to deliver and maintain relationships with key clients.
- **No track record of profitability** urban-gro brass will likely need to demonstrate that it can turn the corner in profitability and consistently generate positive cash flows to convince investors that they have indeed found the right business formula.
- **Keep an eye on liquidity** The company has ample cash (Q1: $4.4m net cash) assuming it hits profitability targets. Plus, easing working capital needs will provide a welcomed boost. Management want to avoid a potential cap hike with the share price trading at rock bottom levels.

Opportunities

- **Europe is still realising** EU members are slowly liberalising their cannabis markets. Although the legal process is fiendishly slow in developing, we see excellent midterm prospects for UG to roll out and replicate its North American-focused business model on this side of the pond.
- **Broaden European footprint** urban-gro's long-term strategy is to duplicate its home market expertise and platform in Europe. Although M&A is idling for now, management want to roll up a highly fragmented European market that offers a large number of suitable takeover candidates.
- **Indoor farming is the future** The world continues to urbanise with 70% (now: ~58%) of humans expected to be city dwellers by 2050. This will put enormous strain on agriculture to feed populations. Although still early-stage, vertical farming can help solve this issue by shrinking the farm-to-table footprint and greatly improving crop yields.
- **Apply expertise to other sectors** Commercial contracts are an excellent opportunity to de-risk cannabis dependence. Now the company is marshalling its expertise to service clients across various industrial sectors, which will help smooth out volatility in the still maturing CEA segments.

Threats

- **Weed law bottlenecks** A number of UG's customers have their projects stuck behind regulatory logjams in several states. The company's core operations depend on the support of lawmakers at the state level and a continued hands-off approach from federal policymakers, since cannabis remains a schedule 1 substance under the US Controlled Substances Act (CSA).
- **Plenty of competition** The horticulture industry is well populated with competitors jockeying for market share, particularly in cannabis. Meanwhile, the market opportunity in VF may attract new entrants with greater market power and size. UG's turnkey platform and indoor CEA expertise help box out rivals focused on greenhouses, but the company's small size could be an issue.
- **Cannabis' low access to banking services** The industry is essentially blacklisted by federally chartered banks making it difficult for clients to not only secure project financing but also in some cases conduct normal business on a non-cash basis.
- **Gridlocked supply chains** The world got a taste of supply chain snarl-ups last year when China shut down and the economy overheated. Specialised equipment needed to realise CEA facilities could become scarce if such macro headwinds resurface.

VALUATION

We use a three-phase DCF model to value urban-gro. After filling up its bullpen with numerous architectural, design, engineering, and construction services over the years, we now regard the company as an EPC contractor and believe this approach is best suited to the business model. The first phase is based on explicit production forecasts through 2025. Subsequent phase 2 projections run through 2035 and are based on growth as well as normalised earnings assumptions, while phase 3 reflects TV (terminal value).

urban-gro is streamlining the complex process of indoor grow facility construction with turnkey solutions. We expect a strong growth trajectory over the midterm led by contract wins on its home turf complimented by EU expansion and forecast a three-year revenue CAGR of 37% for the period 2023 to 2025. UG offers good cash generation potential, thanks to a falling working capital requirement and low CapEx needs for its construction business. We believe the gross margin should approach 19% to 20% over the medium term. Our model factors in a 2.5% terminal growth rate and a 7.4% terminal EBIT margin.

DCF MODEL

In USD '000	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Sales	**97,192**	**129,588**	**171,407**	**210,830**	**248,779**	**286,096**	**317,567**	**349,324**
NOPLAT	**-7,916**	**-4,604**	**-2,798**	**2,730**	**7,087**	**10,859**	**12,960**	**15,206**
(+) depreciation & amortisation	875	648	857	843	746	858	857	854
Net operating cash flow	-7,041	-3,956	-1,941	3,574	7,833	11,717	13,818	16,060
(-) Total investments (CAPEX and WC)	1,676	-1,920	-2,534	-2,686	-2,555	-2,349	-2,140	-2,249
(-) Capital expenditures	*-787*	*-790*	*-1,046*	*-1,075*	*-1,020*	*-887*	*-984*	*-1,083*
(-) Working capital	*2,463*	*-1,130*	*-1,488*	*-1,611*	*-1,535*	*-1,462*	*-1,155*	*-1,166*
Free cash flows (FCF)	-5,366	-5,877	-4,475	888	5,278	9,368	11,678	13,811
PV of FCF's	**-5,020**	**-4,833**	**-3,234**	**564**	**2,947**	**4,597**	**5,036**	**5,235**

In EUR '000	
PV of FCFs in explicit period	29,784
(+) PV of FCFs in terminal period	38,860
Enterprise value (EV)	68,644
(+) Net cash / (-) net debt	8,175
(+) Investments / minority interests	0
Shareholder value	76,820
Fair value per share ($)	7.00

Terminal EBIT margin

WACC	5.9%	6.4%	6.9%	7.4%	7.9%	8.4%	8.9%
10.8%	9.17	9.85	10.53	11.21	11.89	12.57	13.25
11.8%	7.85	8.40	8.94	9.48	10.02	10.56	11.11
12.8%	6.81	7.24	**7.68**	**8.12**	**8.56**	8.99	9.43
13.8%	5.95	6.31	**6.67**	**7.02**	**7.38**	7.74	8.09
14.8%	5.24	5.54	**5.83**	**6.13**	**6.42**	6.72	7.01
15.8%	4.65	4.90	5.14	5.38	5.63	5.87	6.12
16.8%	4.15	4.35	4.56	4.76	4.96	5.17	5.37

Cost of equity	15.1%
Pre-tax cost of debt	9.0%
Tax rate	30.0%
After-tax cost of debt	6.3%
Share of equity capital	85.0%
Share of debt capital	15.0%
WACC	13.8%

Terminal growth rate

WACC	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%
10.8%	10.09	10.42	10.79	11.21	11.68	12.21	12.82
11.8%	8.66	8.91	9.18	9.48	9.81	10.19	10.61
12.8%	7.51	7.69	**7.90**	**8.12**	**8.36**	8.63	8.94
13.8%	6.56	6.70	**6.86**	**7.02**	**7.21**	7.41	7.63
14.8%	5.77	5.88	**6.00**	**6.13**	**6.27**	6.42	6.58
15.8%	5.11	5.19	5.28	5.38	5.49	5.61	5.73
16.8%	4.54	4.61	4.68	4.76	4.84	4.93	5.03

**Please note our model runs through 2035 and we have only shown the abbreviated version for formatting purposes*

We assign a 15.1% COE (cost of equity) to the growing business based on our multifactor risk model which takes into account company-specific risks such as (1) strength of management; (2) earnings quality; (3) transparency; (4) financial risk; (5) competitive position; (6) as well as company size and free float. The primary risk in our view is the high exposure to a cannabis sector vulnerable to regulatory headwinds and with weak access to financing and banking.

After discussing the financing strategy with management, we believe the company will be predominantly equity financed over the long term and assume an 85% equity ratio in our WACC. urban-gro runs debt-free right now, but we think the company should be able to secure bank debt at roughly 9% if needed and factor in a 3.6% risk free rate (referencing 10y US treasury) into our 13.8% WACC. These assumptions result in fair shareholder value of $77m or $7 per share.

WHERE WE COULD BE OFF WITH OUR ASSUMPTIONS

Upside risks to price target and rating (1) our assumptions for the European market may be too conservative. The company is a newcomer in a crowded marketplace, and we have modelled modest growth until we see better traction with its nascent operations on this side of the pond*;* (2) governments may better incentivise indoor farming (VF) to get ahead of food supply issues; and (3) we may have underestimated operational scale effects once topline momentum builds. Management need to prove they can translate potential into actual results.

Downside risks to price target and rating (1) until urban-gro demonstrates that it has the chops to consistently turn a profit and build a visible track record to convince the markets, downward pressure on the stock will likely persist; (2) competition for turnkey solutions in UG's core markets is currently limited, but the entrance of large, well-financed operators could have a deleterious impact on urban-gro's ability to win contracts; (3) cannabis laws are a work in progress in the US and the EU and vary greatly state to state / member to member. Depending on unwavering political will is not entirely prudent and highlights the importance of diversifying into commercial spaces and produce-based CEA.

Figure 1: Reducing the farm-to-table path for fresh produce

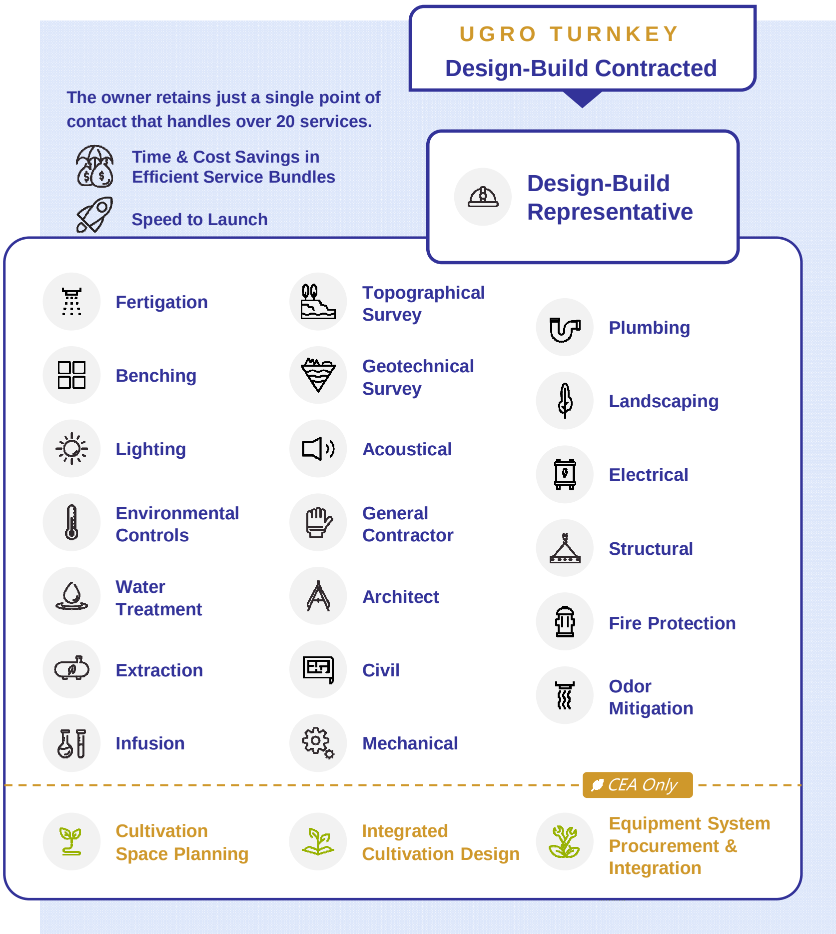
Source: Urban Health Farms

COMPANY PROFILE & BACKGROUND

urban-gro, Inc is a provider of professional turnkey facility services to the CEA industry and various commercial sectors. Headquartered in Denver, Colorado, the company operates six offices across North America and one in the Netherlands to capitalise on an evolving European market. CEA clients chiefly grow specialty crops including cannabis and other produce such as leafy greens, vegetables, herbs and berries (overleaf).

The company's strategy is anchored by its unique ability to act as a single-point-of-responsibility and efficiently orchestrate over 20 design-build services to shave costs and construction time for clientele, while exploiting associated cross-selling opportunities. The approach works for cultivation, retail store fronts, and cold storage warehousing. For the former, we reckon the single-point strategy gets CEA clients up and running in time to produce 1 to 2 extra harvests.

Figure 2: Single-point-of-responsibility turnkey platform



Source: First Berlin Equity Research; urban-gro

Broad range of expertise spurs the business The service portfolio is the lever currently driving the business after M&A filled in key missing pieces. UG made two key acquisitions in 2022 (overleaf) to bolster its service portfolio with broader know-how and key staffing and to also expand its geographic reach into Europe.

More recently, the company has begun to service non-CEA clients in commercial sectors, such as CPG (consumer packaged goods) and healthcare. The services provided are similar but less complex than CEA, and this has opened the door to customers also seeking retail store fronts as part of their orders. Although we do not see this as core business, commercial allows UG to adapt to variations in CEA business cycles and promote workforce flexibility.

ORIGINS OF A TURNKEY CEA PROVIDER

urban-gro was founded by CEO Bradley Nattrass and Octavio Gutierrez as a limited liability company in 2014. The company earned its chops as a lighting specialist outfitting convention centres, stadiums and other municipal structures, while sizing up opportunities in the emerging cannabis cultivation industry

Figure 3: Indoor farming is no longer science fiction

Source: First Berlin Equity Research; urban-gro

At that juncture the grow-light intensive cannabis cultivation industry was still largely taboo and ignored by incumbent lighting specialists due to the risks. urban-gro seized the opportunity to sell high-margin tailored LED lighting solutions into the emerging cannabis sector, which eventually opened the door for the company to become a full value-added reseller for equipment (VAR) and a CEA system consultant.

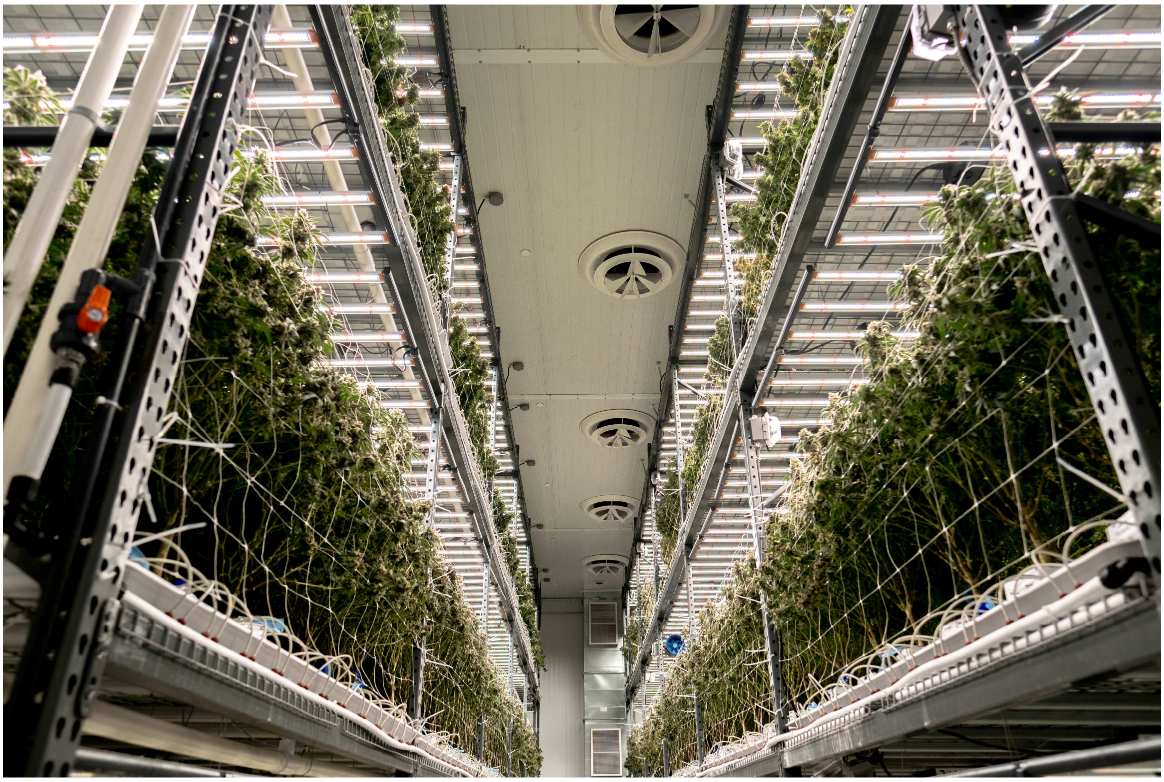
Controlled Environment Agriculture facilities are complex and dependent on the interplay of a myriad of technologies and systems to maximise plant yields. urban-gro brass quickly understood this and shepherded the business through a number of iterations to gain more upstream influence and help customers avoid design mistakes.

This path in turn paved the way for the company to branch out into the design of other critical CEA components, such as benching, water and irrigation systems, and eventually the more complicated fertigation, which is the technique of supplying dissolved fertiliser to crops through an irrigation system to promote plant growth.

The upstream pull eventually led to the acquisition of an engineering firm allowing urban-gro to segue into the important HVAC (Heating, Ventilation, and Air Conditioning) step in the facility value-chain.

At this point, the company basically operated as a VAR with engineering services, while selling HVAC. But customers were still making costly mistakes, and UG controlled too few steps in the value-chain to help its clients get it right.

Figure 4: CEA is now driving cannabis cultivation



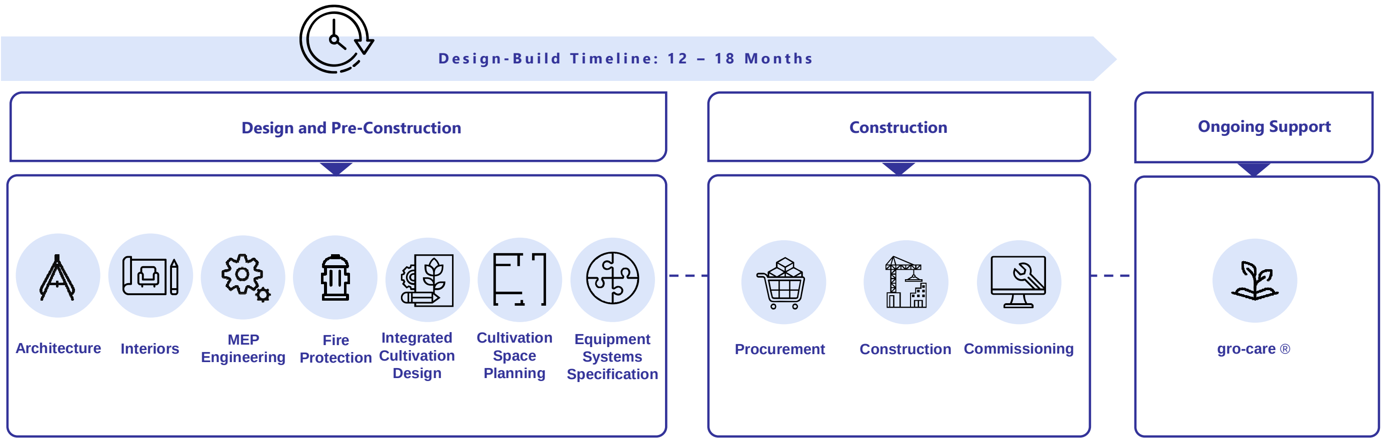
Source: First Berlin Equity Research; urban-gro

The company uplisted onto the Nasdaq Stock Exchange in February 2021 and raised circa $62m with its IPO to supercharge its business. The full war chest allowed the company to: (1) expand its service portfolio towards and pursue its vision of a turnkey solutions provider covering architecture, engineering and construction management; (2) enter new markets with the emerging trends in vertical farming (VF) for produce; and (3) make inroads into the European market.

BUSINESS MODEL

urban-gro is streamlining the design and building processes for construction of high-performance CEA facilities, while ensuring operational efficiency with a full range of services covering architecture, design, engineering, and cultivation for completed buildings throughout their lifespan. The company's two primary revenue streams derive from fee-based, knowledge-driven services flanked by value-added reselling (VAR) of equipment common to CEA.

Figure 5: End-to-end design-build project work flow



Source: First Berlin Equity Research; urban-gro

After expanding its business platform through M&A, the company reshuffled segment reporting last year with the addition of the Construction Design-build category. UG now breaks down sales into three core segments. A fourth catagory, 'Others', captures consumable products but contributes < 1.5% of Group turnover and is immaterial for our business assessment.

Equipment Systems captures the VAR activities and is spurred by the sale of all-in project solutions rather than individual cultivation equipment. The staff commands a trove of equipment and technology knowledge, which allows urban-gro engineers and product experts to guide clients in vetting and selecting the best solutions for their planned ecosystems. The segment took a hit in 2022 in the wake of reduced CapEx budgets across CEA, but we expect a gradual uptick as we progress through 2023.

Construction Design-build is spearheaded by the Emerald CM subsidiary and includes the turnkey design-build activities. We believe the move into turnkey will allow the company to zero in on larger and more complex big-ticket projects coupled with higher margins. We also expect these to translate into a higher market clout and smooth out quarterly performance. The segment notched $20m in sales last year and accounts for roughly 91% of the $105m Q1 order backlog.

Services The segment covers the full range of services that also drives Construction Design-build projects but on an *à la carte* platform for the CEA and commercial sectors. Segment sales rank third behind Equipment Systems but first in terms of gross margin. The company guides for segment GM north of 40%.

IMPACT OF SEGMENT MIX ON CASH CYCLES

Turnkey projects in the Construction Design-build segment are largely based on progress and milestone billing. Services are likewise based on progress-billing, while the equipment business is coupled with a 50% deposit and the balance due prior to shipping. The overall business does not have any material recurring revenue streams, but we think this combination will lead to consistent operating cash flows, once the segments hit their stride.

CORPORATE ACTIVITY

Following its successful IPO, UG engaged in a flurry of corporate activity to deepen its design services bench and move into construction. The latter was the key missing piece in offering turnkey solutions. The company closed three deals over 2021 and 2022 with companies that had previously been valued working partners, who were a good cultural fit and could easily be integrated into operations.

DAWSON VAN ORDEN

Last November, UG acquired Dawson Van Orden, Inc (DVO), a Texas-based indoor CEA-focused engineering firm. Founded in 1974, the consultant provides mechanical, electrical & plumbing (MEP) engineering services.

Rationale The business combination boosted engineering talent and provided non-cannabis industrial exposure, while acting as a force-multiplier to the existing services. UG previously used DVO, whose specific expertise includes fire protection engineering, as a subcontractor. This weakened UG's single-point-of-responsibility strategy. The ultimate result of the transaction has been greater margin capture.

Terms urban-gro paid $6.1m for DVO entailing a $1.2m cash component, 272k urban-gro shares valued at $1.1m and a $3.8m promissory note to be paid out over four quarters. DVO generated TTM (trailing twelve month) turnover of $5.5m with a 20% EBITDA margin at the time of the takeover pointing to an attractive 5.5x EBITDA multiple,

EMERALD CM

In April 2022, urban-gro took a major step into the CEA market with the takeover of Emerald Construction Management Inc. The 37-year old, Colorado-based construction management firm provides a full suite of construction and supervisory services from initial design to final build-out. The outfit also boasts a seasoned team that has forged a top reputation with clients and a network of architects, engineers, subcontractors and vendors.

Rationale The deal allowed urban-gro to strengthen its single-point-of-contact strategy and establish itself in the indoor CEA industry as the only full-service, turnkey, design-build company with the ability to service its clients as a one-stop shop. The combination also populated UG's project pipeline with Fortune 50 clients, while harnessing valuable synergies between its existing service and equipment integration solutions and Emerald CM's client base. Emerald operations now serve as the backbone of UG's Construction Design-build revenue segment and contributed some $20m to the 2022 topline.

Purchase multiple looks attractive urban-gro bought Emerald for a total purchase price of $7m, which includes an earn-out of up to $2m. The contingent consideration is payable quarterly over a two year time frame from the 29 April 2022 closing and will be equal to 35%

of Emerald's gross profit. The achieved earn-outs will be satisfied with UGRO common stock. At the time the deal was inked, Emerald guided for $26.5m in 2022 sales with adj. EBITDA of $1.2m. This equated to a 5.8x adj. EBITDA multiple on the full $7m purchase price.

MJ12 DESIGN STUDIO

In August 2021, urban-gro acquired the Colorado-based MJ12 Design Studio and its associated companies 2WR+ Partners. The architectural firm's business is anchored in CEA for cannabis with full design services for cultivation, processing, manufacturing, operations, and retail dispensaries. Founded in 2001, MJ12's credentials include the design of over 110 CEA facilities and 50 dispensaries, comprising more than 9m square feet in 21 states and four countries.

Rationale The deal broadened urban-gro's service portfolio with early-stage conceptual design and planning, which in combination with UG's existing offerings allowed the company to offer fully integrated design solutions for cultivation, processing, extraction, and retail facilities into the CEA market.

Reasonable multiple urban-gro paid $9m for MJ12 with a combination of cash and UGRO stock including an earn-out of up to $2m based on performance metrics. Prior to the deal MJ12 reported 2020 sales of $6.2m and AEBITDA of $1.0m equating to a multiple of 9x reflective of the seller's market at that time.

CURRENT STATUS OF M&A

After talking with management, we believe the company has now fully integrated the new companies into the UG mothership and that there are no glaring holes in its service portfolio to fill at this time. However, we do expect the company to continue to assess opportunities, particularly in Europe, as business here (overleaf) ramps up.

WHAT IS CEA?

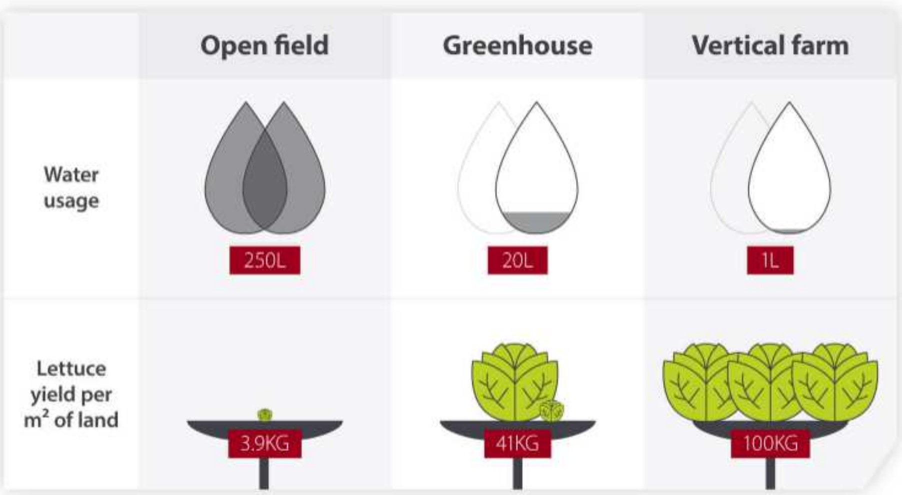
Controlled Environment Agriculture (CEA) is an advanced and intensive form of hydroponically-based agriculture where plants grow within a controlled environment to optimise horticultural methods. These buildings cover the various growing methods common to indoor vertical farming, greenhouses, container grows, and even hoop houses. Aside from sealing off volatile outside environments, these facilities provide everything artificially that plants need to thrive at their various growing stages including water, temperature, humidity levels, ventilation, light and CO_2.

According to the historian William Dalrymple, CEA dates all the way back to the Roman Emperor, Tiberius Caesar (14 A.D – 37 A.D.) who needed a solution to follow his doctor's prescription of a cucumber per day for good health. Today, CEA is a high-tech operation featuring LED lighting specifically tuned to generate only the wavelengths plants need to thrive, resulting in saved energy. Bugs are kept out, so no pesticides are needed. CEA also requires 95% less water than traditional agriculture and conventional greenhouses (figure 6).

CEA facilities are complex, housing a myriad of systems that have to be synchronised to provide the right ecosystem, and their construction is hard. Construction and operation demand sound knowledge of design, technology, fabrication, chemistry, horticulture, plant physiology, plant pathology, and entomology.

Despite these challenges, CEA has become synonymous with the liberalising cannabis industry, thanks to its ability to cultivate these valuable crops. Cannabis requires stable and absolute conditions to produce yields that meet high standards—precisely the ecosystem that CEA can provide when done right. At the same time vertical farming is being explored as a solution to shorten the farm-to-table distance for growing urban populations.

Figure 6: CEA's water consumption advantages



Source: First Berlin Equity Research; dantherm group

It all sounds pretty good. . . Well-managed CEA operations have several appealing advantages: (1) they provide fresh, high quality produce and pharmaceutical plants free of agriculture chemicals; (2) they allow small farmers to diversify and boost economic stability; (3) they can help power utilities by setting their own "days and nights" to match times when power is cheaper. The latter is a feature we reckon grid operators will increasingly pay for.

. . . but CEA does have several drawbacks Facilities are expensive to build—UG estimates costs for cannabis CEA to range $450 to $675 per ft²—while maintenance costs are also high. And funding for cannabis projects can still be challenging to secure. Artificial lighting requirements also mean high energy costs, but outfitting facilities with solar rigs could help offset expensive grid power going forward. Plus, indoor pollination can also be tricky, but cultivators are quickly learning.

VERTICAL FARMING

Indoor farming or 'vertical farming' (VF) uses CEA technology and configurations to cultivate crops that grow on top of each other in vertically stacked layers, rather than just next to one another in fields.

By using vertical space, indoor farms can be built in the heart of towns and cities to yield fresh vegetables, berries, greens, and herbs all year round, and it is considered to be a greener way to produce food. The industry largely aims to solve the growing need for sustainable and resilient food supply chains.

Table 1: Stacking up VF vs traditional and greenhouse methods

	Traditional	Greenhouse	Vertical farm
Growth process	70 days	40 to 50 days	21 days
Number of crops / m²	18	25	25 to 300
Crop cycles	season	season	year round
Water usage	35L	15L	1.5L
Pesticides	often	occassional	never
Location	green field	restricted	anyw here
Post-harvest logistics	high	medium	low

Source: Urban Health Farms

No need for soil or sunlight Cultivating fresh produce in artificial environments is no longer the stuff of science fiction. From the outside, these structures resemble tall, metal-clad barns, but once you step through large airlocks designed to keeps bugs out, a kaleidoscopic scene emerges—towers stacked with dozens of trays growing kale, red and green salads, cilantro, and an assortment of berries.

Most vertical farms share a few attributes. One is a lack of soil. Their stacked rows of crops are mostly grown hydroponically—a technique where the roots sit in trays filled with an aqueous, nutrient-injected solution. However, some growers, including many cannabis producers, also fill the trays with substrates. These contain things like rock wool (insulation is made from rock mineral, or coco coir (shredded, sterilized, coconut husks) and are fed water and nutrients either by: (1) drip irrigation through the fertigation system; or (2) flood trays whereby the solutions are flooded onto the tray and then drained via the fertigation system. Aeroponics is an alternative grow method that sprays the roots with a nutrient-rich mist. However, aeroponic farming is far less prevalent than hydroponics.

Either way, a lot less water does more work (table 1), and the absence of soil allows precise control over the nutrients all the roots receive. From the important environmental perspective, no soil also means no fertiliser runoff into waterways.

Sunshine is absent, too. Light comes from strips of LEDs arranged to optimise illumination to tightly packed plants. Naysayers say LEDs and their required power cost money, but LED pricing is dropping fast, while their per kilowatt hour generation is climbing.

Tackling food security According to the UN's Food and Agriculture Organisation (FAO), some 2bn of the world's 8bn people do not have enough to eat. Moreover, by 2050, the total population is projected to grow to almost 10bn. This outlook looks even more daunting with top researchers projecting 80% of the world's calories will be consumed by city-dwellers by 2050.

Early stages of realisation. . . North American spearheads the VF market and is attracting investment capital. Top operators and their investments include: (1) InFarm ($270m); (2) Plenty ($140m); AeroFarms ($100m); Bowery ($50m); and (5) 80 Acres Farms ($40) according to a joint white paper by UG and Agritecture Consulting.

Similar drivers are prodding Europe to explore vertical farming solutions with Germany ranking number four worldwide in growth (figure 13 overleaf), which comes as no surprise after years of migration to its metropolitan hubs, which are now bursting at the seams with low proximity to available farmable dirt to support traditional agriculture expansion.

. . . but a viable solution to bolster food chains The world's sprawling cities need more efficient food supply chains. VF may never be able to feed the world or handle bulky field crops such as rice and wheat. Heavier vegetables will also be tricky to solve barring technology advancements; meaning potatoes, pumpkins, or zucchini won't be on the indoor farming menu. But VF can scale to provide fresh produce to a lot more people, and we see VF as a key part of the overall solution.

THE UPSHOT FOR URBAN-GRO

Earlier this year, we had an opportunity to meet the various teams that make UG's CEA business work. The company has built up a wealth of expertise over the years that can be readily applied to indoor facilities, whether for cannabis or produce-based VF. Both sectors usher the plants through the various stages of their lifecycles and harvests, while cannabis involves trim rooms and extraction labs.

As we outline overleaf, the cannabis industry has arrived, while VF is in the early stages of realisation. Both sectors provide enormous opportunities for UG, although VF is a few years away from truly taking off. We like the company's business model for its flexibility across these markets and think UG will continue to gain market share as the industries evolve.

Figure 7: Vertical farm root system; no soil needed

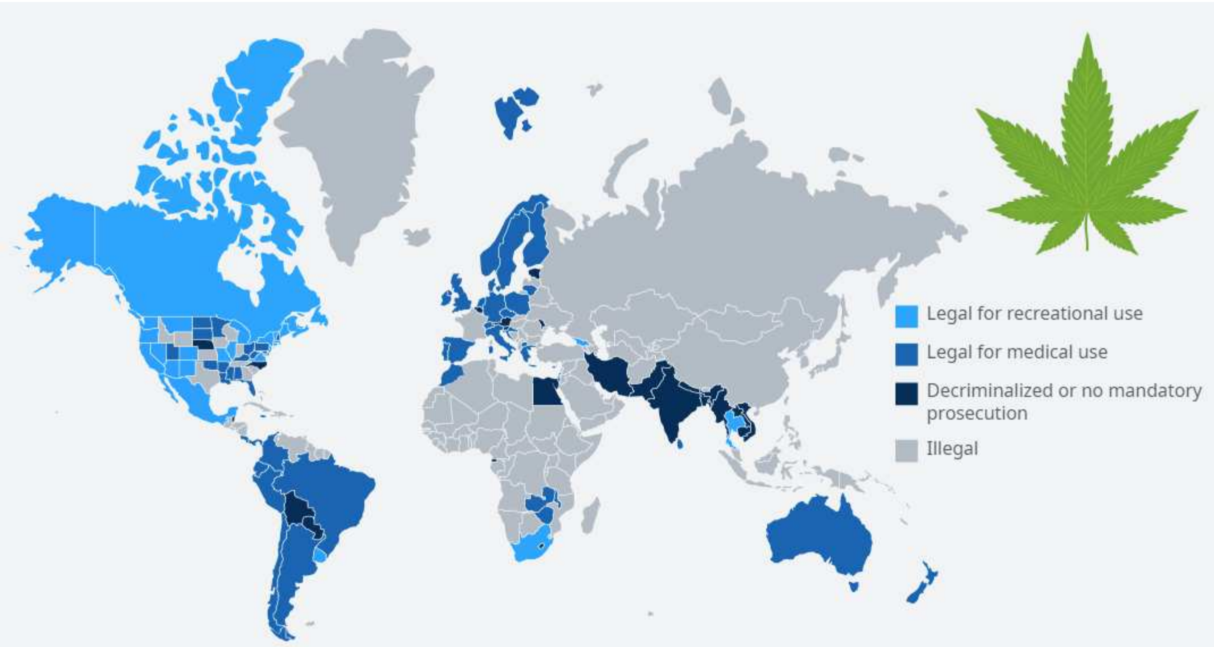
Source: First Berlin Equity Research; urban-gro

LEGISLATIVE OVERVIEW

It is far from straight forward for regulators across the world to weigh the interests of investors, small entrepreneurs, vertically-integrated big firms, established medical providers, and consumers. The industry has been slowly liberalising in the West for over two decades now with policies at times conflicting at the federal and state levels.

The legal map below is constantly shifting. For our assessment, we highlight the status for urban-gro's home North-American market and outline Germany's latest bill that will legalise pot for recreational use. Importantly, this framework could serve as a model for other EU states to adopt.

Figure 8: Legal status of cannabis across the globe



Source: First Berlin Equity Research; Deutsche Welle

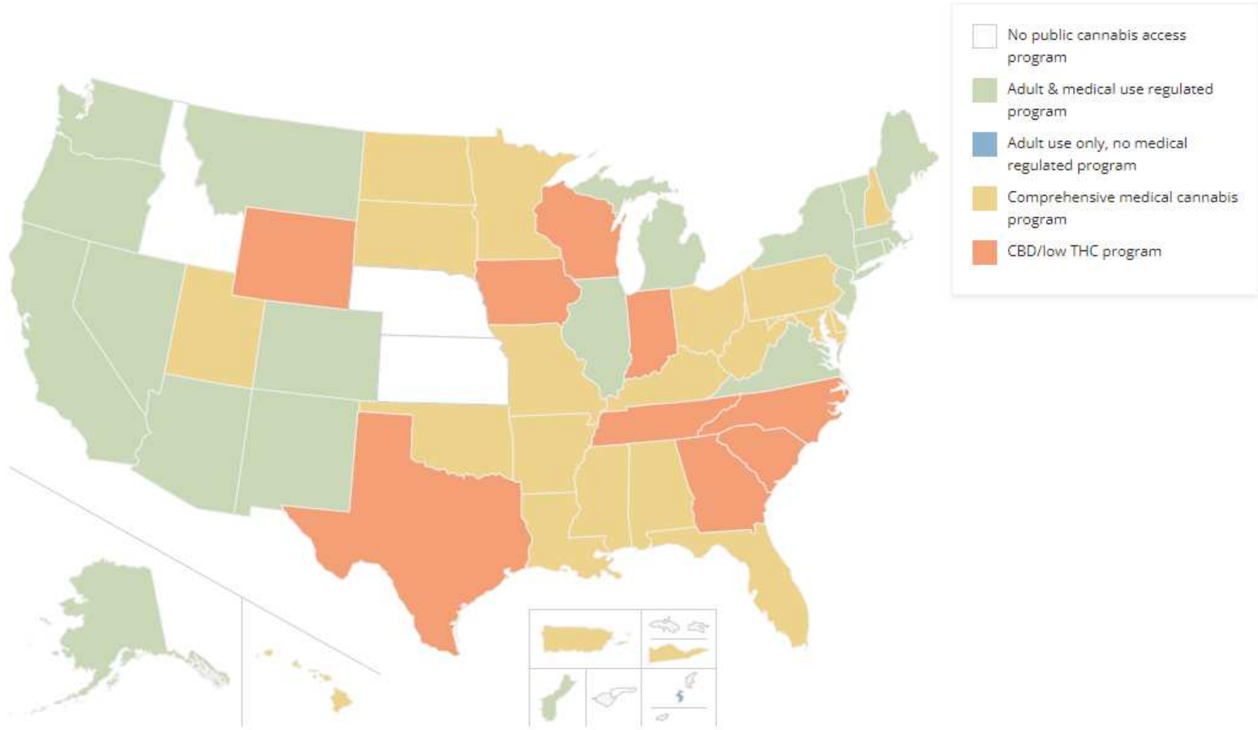
US LEGISLATIVE SITUATION

Cannabis laws vary from state to state in the US. California pioneered licensing of medical marijuana in 1996 and liberalised recreational use in 2016. The state is now the largest legal weed market in the world, having raked in $5.2bn in sales in 2021.

Plus, it's been more than a decade since voters approved first ballot initiatives legalising marijuana in Colorado and Washington. New York became the 15th state to legalise adult-use cannabis in 2021 and its entry into retail weed is leading a third wave of legislation—the roll-out of licenses for dispensaries.

The state laws are designed to reflect growing public approval of a drug now considered less harmful than nicotine and alcohol, while factoring in communities disproportionately affected by the criminalisation of pot.

Figure 9: US cannabis legislative map



Source: First Berlin Equity Research; National Conference of State Legislatures

As of April 2023, 38 states, three territories and the District of Columbia allowed the medical use of cannabis products, whereas 21 states, two territories and the District of Columbia regulate recreational dispensaries (figure 9).

Retail business is emerging In the United States, cannabis dispensaries, or marijuana shops are regulated by local governments. These physical locations are typically set up inside retail storefronts or office buildings, in which cannabis items are peddled for medical or recreational use.

EUROPEAN SITUATION

Overall drug-related crime is up annually, and lawmakers want to reverse this trend. They reckon legalising weed will lead to cleaner products, disrupt the black market, and protect youth, while relieving strained law enforcement and pumping funds into state coffers with a weed tax.

Marijuana laws across the EU are also complex. Cannabis-based medicines may have EU or national authorisation, but no country officially allows cannabis smoking for medical treatments. Retail points-of-sale, or “coffeeshops”, are tolerated in the Netherlands and have been a fixture in Amsterdam since the 1970s.

There is likewise little harmonisation among EU Member States in the laws penalising unauthorised cannabis use or supply. Some countries legally treat cannabis like other drugs; in others, penalties vary according to the drug or offence involved.

GERMANY MAY BE THE MODEL FOR EUROPE

Germany is considered to be the lever that may crack open Europe’s cannabis industry. Medical cannabis has been legal since 2017 for patients with a prescription, while recreational use is illegal, but users cannot be prosecuted for possession of small quantities for personal usage. Now German lawmakers are finalising policy in a two-step plan that will legalise pot for recreational use.

In the first phase, people over the age of 21 can legally possess up to 25 grams of "recreational cannabis" for personal consumption. Possession will be capped at 50 grams per month. Moreover, weed connoisseurs will be permitted to grow up to three plants per person for personal use.

In the second stage, Germany will regulate marijuana sales. An earlier draft envisioned a state-controlled supply chain from cultivation to point of sale; however, this idea has been scrapped in favour a model where consumers can purchase weed only through specialist licensed shops.

The German Bundestag and Bundesrat, parliament’s upper and lower houses, still have to ratify the proposed laws, which could take some time, given the fiendishly slow pace of German red tape. Plus, the new legislation will require a stamp from the EU. If successful, Germany’s two-step framework could become the blueprint for other EU members to follow that could turn Europe into the next weed El Dorado. The UK, Poland and France are considered massive market opportunities and treat recreational users similar to Germany, although France has yet to legalise medical cannabis.

Upshot for urban-gro UG put its flag in the ground in the Netherlands a year ago in anticipation of a liberalising European market. The new office is led by Arie Kamp, an industry veteran with 2+ decades of horticulture expertise, and we see no reason why UG’s business will not translate to the old world. The company will have to acquire the local expertise to navigate legal frameworks and build relationships with suppliers and skilled workers. But the market opportunity is clear and could supercharge UG’s growth.

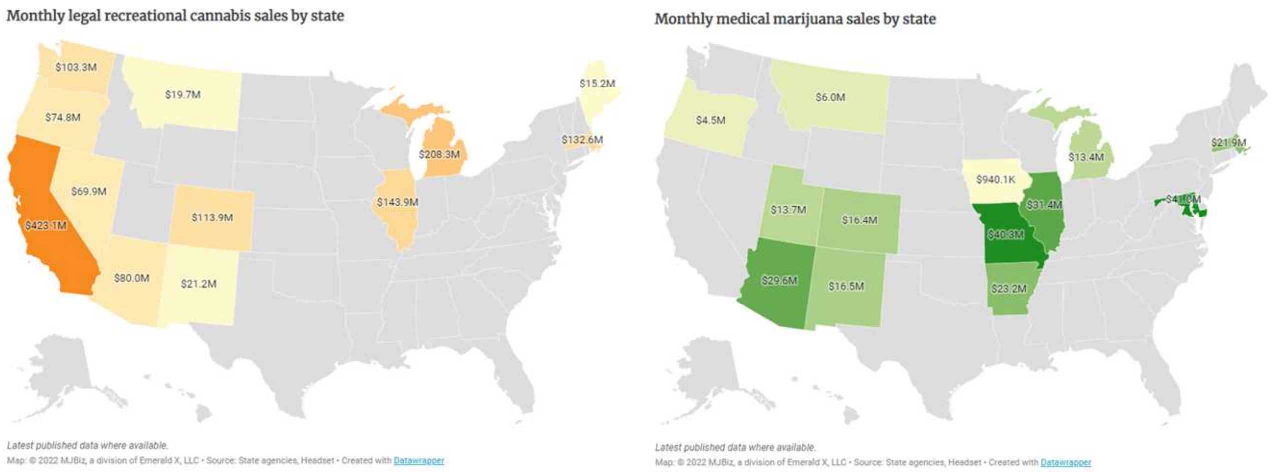
CANNABIS FARMING DATAPOINTS

The Center for Disease Control said some 53m Americans—19% of the population—used weed for either recreational or medical-use in 2021, while Statista, a data outfit that tracks such things, says some 62m Europeans used cannabis at least once in 2021. And trends point towards further growth providing a large TAM for urban-gro on its backyard, while it eyes European expansion with its CEA business.

Cannabis is big business in the US. . . In the United States, cannabis is increasingly used in the cosmetic, pharmaceutical, and the food & beverage industries. The spreading legalisation and rising social acceptance of its use for medical purposes and adult recreational consumption are the key factors propelling market growth.

America's cannabis industry took some hits in 2022 after pandemic effects—wallets flush with stimulus money and anxious consumers looking to relieve stress—faded. Nevertheless, the market is thought to have been valued at $30bn last year. Market watcher, MJBiz, thinks US marijuana sales will approach $57bn in 2028, while top cannabis intelligence firm, Brightfield Group, projects $50.7bn in annual sales by 2028 and is calling for a 10% CAGR for the period 2023 to 2028.

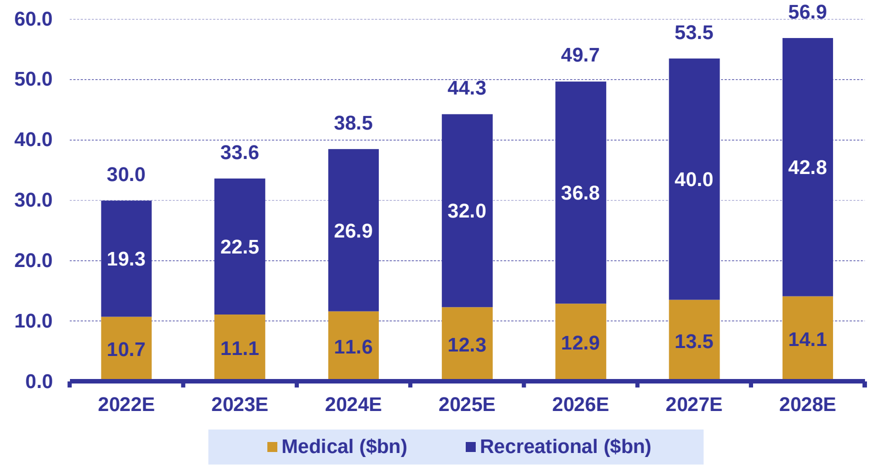
Figure 10: US monthly sales by state and use



Source: First Berlin Equity Research; MJBiz, National Conference of State Legislatures

Seven state markets kick-started cannabis sales (six adult-use, one medical) last year with four of these opening for business in H2/22. New York only came online in the final days of 2022, and MPG, a consultancy group, reckons the Empire State's cannabis market could rake in sales of $4.2bn by 2027. Further growth is expected from new states with three more launching sales in Q1/23: two adult-use (Connecticut and Missouri) and one medical (Mississippi). Maryland is expected to implement its legislation for recreational-use sales this year as well.

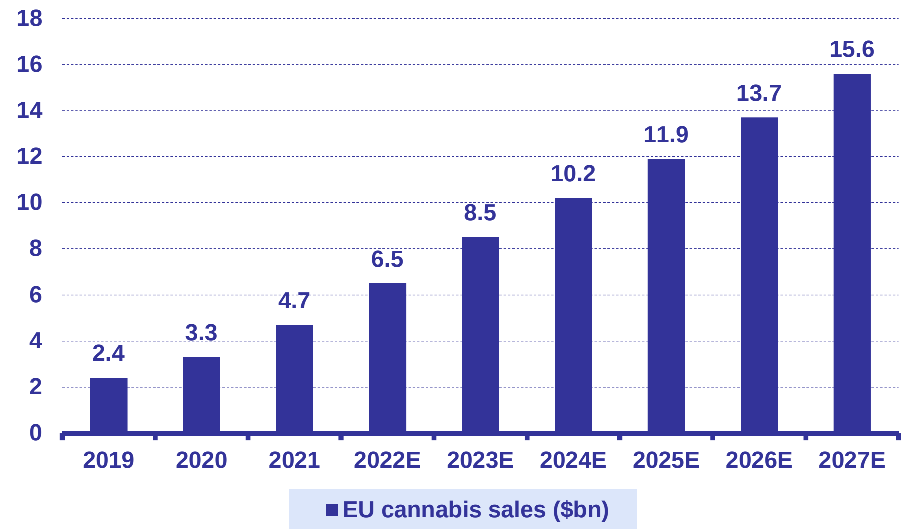
Figure 11: U.S. cannabis retail sales estimates



Source: First Berlin Equity Research; MJBiz

. . . and so is Europe Meanwhile in Europe, the picture is much the same with medical-use becoming more mainstream and law enforcers mostly looking away when small leisure consumers spark up. In its latest report, Health & Wellness sees the number of CBD users across the European continent hitting 50 million by 2026, while Statista analysts expect the European cannabis market to top $15bn in 2027 on the basis of a 16.4% CAGR (2023-2027). Other market watchers are even more bullish calling for a 22% CAGR.

Figure 12: European cannabis sales and forecasts



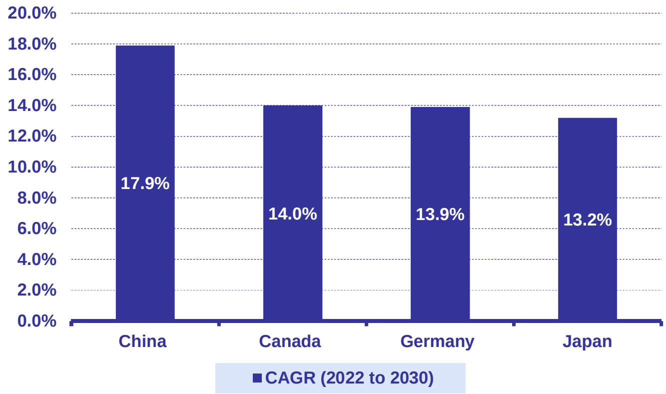
Source: First Berlin Equity Research; Statista

Germany could be a bonanza As German lawmakers wrangle over the final draft designed to legalise recreational cannabis use, market analysts are sizing up the country's enormous market potential. According to its Federal Institute for Drugs and Medical Devices (BfArm), Germany imported some 20 tonnes of medical-use cannabis in 2021. Market watcher, Haucap, reckons this figure could explode to 400 tonnes p.a. with adult-use legalisation. urban-grow Europe BV is poised to participate in this emerging opportunity.

VERTICAL FARMING IS ALSO ON THE RISE

Statista valued the 2022 global indoor farming market at $38bn and looks for the industry to top $55bn by 2032. Grand View's analysts are even more optimistic calling for an $88bn market value by 2030 spurred by a 13% CAGR from 2023 to 2030.

Figure 13: Top vertical farming CAGRs by country 2022 to 2030



Source: First Berlin Equity Research; Statista

Drivers include the need to meet rising food demand for expanding populations at a time when farmable land is increasingly scarce—particularly near cities where undeveloped dirt has all but vanished. Government agencies such as European Environment Agency (EEA) are working to support VF and clean up carbon belching sectors, such as logistics. Shortening farm-to-table routes is part of the equation.

UPSHOT FOR URBAN-GRO

Thus far, the VF market has not translated into much business for UG. But we think it is merely a question of when. The company has a trove of CEA experience that dovetails into vertical farming.

COMPETITION

Similar rivals and suitable market comps are tricky to identify due the varied DNA of EPC operators that have their tentacles spread into a myriad of services and industries. Plus, commercial buildings all have unique characteristics that require input from specialists. We hold this especially true for CEA. On a business level, urban-gro mostly competes against local contractors or service providers for contracts but sometimes runs into larger rivals like Arco Murray or Dominion AG, which has even led to joint-projects in the past.

The market is populated with several public EPC operators, but the larger more established EPC brethren have largely steered clear of the weed business to avoid the regulatory headaches.

Service oriented EPCs include: (1) BWX Technologies (BWXT US); (2) SunPower Corp (SPWR US); and (3) Bowman Consulting Group (BWMN US). Their market caps range from $0.4bn to $6.0bn with annual turnover ranging up to $2bn. The AECON Group (ACM US) is a construction-driven EPC with an $11bn market value and $11bn in sales p.a.

CEA peers focused on indoor cultivation include: (1) Hydrofarm Holding (HYFM US), a distributor of hydroponics to retail stores; (2) Grow Generation Corp (GRWG US)—retail storefront seller of hydroponic equipment and consumables; and (3) CEA Industries (CEAD US)—offers solutions into CEA but with no architects or construction managers on staff. While their missions may look similar to that of urban-gro, variations in their business models make their comps an unreliable gauge of fair value.

Figure 14: Vertical farming plant racks

Source: First Berlin Equity Research; urban-gro

LATEST FINANCIAL RESULTS

First quarter reporting was consistent with the outlook given with Q4. The first three months were shaped by the ongoing cannabis weakness, which particularly hurt Equipment Systems (-83% Y/Y), and the shift in the business mix towards the Construction Design-build segment spurred by commercial activities (figure 15).

The company also signed >$28m in new contracts for the period pushing the backlog (figure 17 overleaf) to $105m (YE22: $93m). Another deal originally expected to close in Q1 for around $28m will likely be added to the Q2 order books.

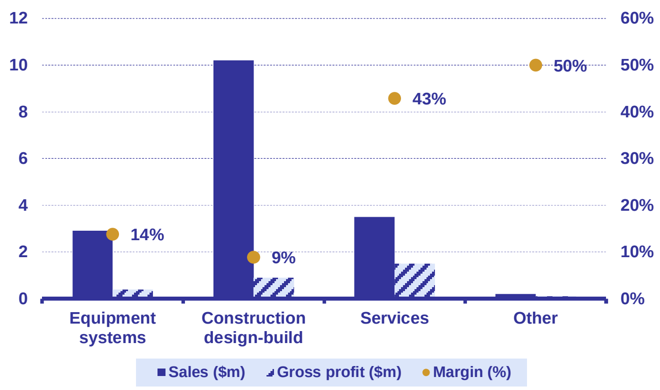
Table 2: First quarter vs prior year period

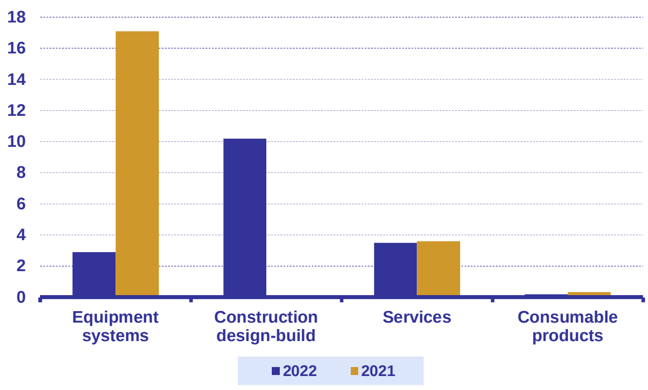
All figures in USDm	Q1/23	Q1/23E	*variance*	Q1/22	*variance*
Revenue	16.8	n.a.	-	21.1	*-20%*
Gross profit	2.8	n.a.	-	4.9	*-42%*
Margin	*16.9%*	-	-	*23.3%*	-
AEBITDA	-3.4	n.a.	-	0.4	-
Margin	-	-	-	*2.1%*	-

Source: First Berlin Equity Research; urban-gro

Group revenues tallied $16.8m for the January-to-March period vs $21.1m in the prior year period. The 20% Y/Y shortfall is traced to the collapse of the Equipment Systems segment, which was not fully compensated for by Construction Design-build.

Figure 15: Revenue and profitability by segment; Q1 Y/Y sales comparison (in $m)





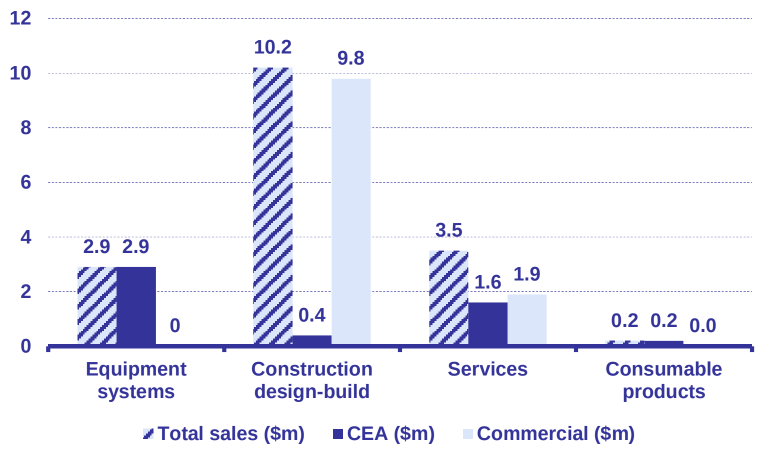
Source: First Berlin Equity Research; urban-gro

Profitability was also impacted by the swing in revenue mix towards the lower margin Construction Design-build. The higher margin Equipment Systems accounted for 17% of the group Q1 topline vs 81% in the prior year period, while Construction Design-build contributed 61% to Q1/23 turnover (Q1/22: 0%).

At the operational level, UG was able to optimise several processes in Q1. Although this impact was not yet visible in the first three months, this will lead to around $2m in annualised cost savings that will help boost profitability going forward. Management noted on the last earnings call that Q1/23 should represent a trough in AEBITDA, which fell to $-3.4m for the period. The KPI decline was occasioned by the lower GM and a higher headcount.

Commercial leads Q1 performance The company has been working hard to balance out volatility in the CEA business with more commercial contracts. The latter accounted for the bulk of Construction Design-build sales in the January-to-March period (figure 16) offsetting CEA weakness with several large projects stuck behind legislative red tape. The company looks for the mix to again favour CEA in Q3 with an overall blend returning to ~2/3 CEA and 1/3 Commercial.

Figure 16: Segment sales by sector



Source: First Berlin Equity Research; urban-gro

Balance sheet developments UG exited Q1 with net cash of $4.4m equal to $0.41 per share, thanks in part to a $2.4m cash settlement that helped offset operating losses in the January-to-March period. Aside from operational losses, working capital was still distorted by open receivables tying up cash flows. This owes to the timing of cash payments traced to a Fortune 50 client in the process of offshoring its AP (accounts payable) processing. After speaking with the CFO, we see scope to pare down high account receivables in the coming quarters and for working capital pressure to generally ease and free up log jammed cash flows.

Table 3: Financial highlights

All figures in USDm	Q1/23	2022	*variance*
Cash & liquid assets	7.3	12.0	*-39%*
Financial debt (short- and long-term)	2.9	3.8	*-24%*
Net debt / (net cash)	-4.4	-8.2	-
Total assets	64.1	62.1	*3%*
Shareholders' equity	30.3	34.7	*-13%*
Equity ratio	*47%*	*56%*	-

Source: First Berlin Equity Research; urban-gro

The equity ratio dipped to 47% on the Q1 net loss but remains at comfortable levels, and UG made its scheduled payment on the outstanding promissory note, which represents the only interest bearing debt on the balance sheet.

OUTLOOK & PATH TO PROFITABILITY

urban-gro is at the vanguard of CEA design, engineering and construction with its growing portfolio of services and turnkey solutions. The company breaks down its reporting into three primary segments. Equipment Systems captures the performance of the company's long-standing VAR business, while Construction Design-build was added last year and corals the turnkey activities. The Services segment buckets the array of *à la carte* services offered across CEA architectural design, engineering, and construction, as well as some commercial spaces, whereas secondary revenue streams from consumables flow into the small 'Others' category. Management want the mid-term sector mix to settle in at 40% each for cannabis and produce CEA and 20% for commercial.

Table 4: 2022 revenue by segment

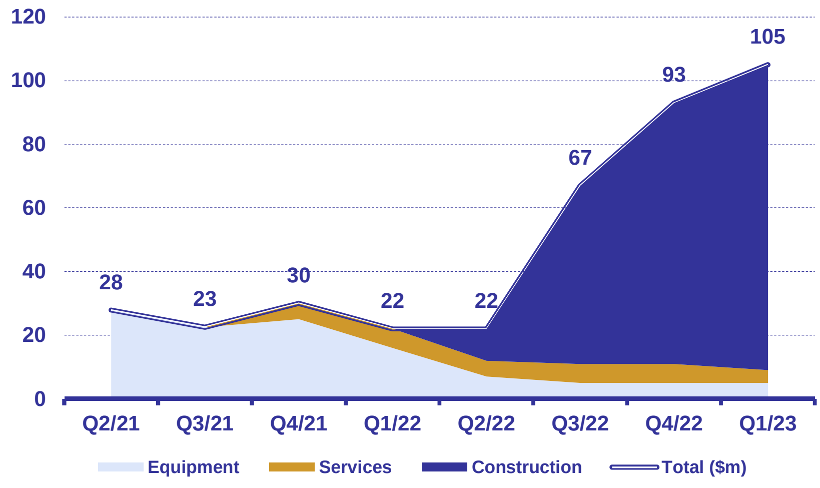
USDm	CEA	Commercial	Total	*relative value*
Equipment systems	33.3	0.0	33.3	*50%*
Services	8.0	4.8	12.8	*19%*
Construction design-build	1.7	18.2	19.9	*30%*
Other	1.0	0.0	1.0	*1%*
Total	44.0	23.0	67.0	-
% of total sales	*66%*	*34%*	*100%*	

Source: First Berlin Equity Research; urban-gro

ORDER BACKLOG

The Q1/23 backlog tallied $105m (+13% Q/Q) and comprised 30% commercial (non-CEA) projects valued at $29m. urban-gro brass believe this ratio can climb up to ~35% by the end of 2023 and improve diversification. The $67m in CEA contracts remain cannabis driven with no material produce deals in the backlog. Management are seeing steady demand for services as well as turnkey and expect to move several idling projects into turkey construction and the equipment integration stages, once regulators grant overdue licenses.

Figure 17: Order backlog developments



Source: First Berlin Equity Research; urban-gro

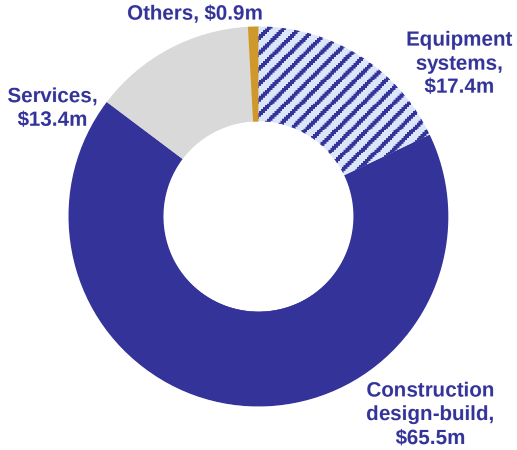
The backlog is also broken down by segment into: (1) Equipment Systems; (2) Services; and (3) Construction Design-build. UG determines its backlog for Equipment Systems and Services with signed contracts, whereas Equipment Systems contracts are also generally locked in with a customer deposit. The Construction Design-build backlog comprises construction projects with an awarded contract and that have a high funding probability.

Historically, the Equipment Systems and Services backlog has been converted into revenue within two quarters, while we expect Construction Design-build bookings to run 12 to 18 months.

REVENUE & EARNINGS ASSUMPTIONS

Industry trends in cannabis and the realising indoor farming sectors support plans for continued expansion of its proven concepts, and the company exited Q1 with a $105m order backlog after inking some $28m in deals in the January-to-March quarter.

Figure 18: 2023 FBe revenue breakdown



Source: First Berlin Equity Research; urban-gro

Growth and profitability assumptions The company traditionally made its crust with its VAR (Equipment Systems) and Services businesses. Now, after the acquisition of DVO in 2022, the Construction Design-build newcomer is set to take the growth reins and will contribute a full year to the topline. We also expect an uptick for Equipment Systems from anaemic levels witnessed in H2/22 and Q1 this year.

In terms of quarterly earnings cadence, we expect a much narrower loss at the AEBITDA level in Q2. The company recently slashed $2m in overhead costs, and we look for the KPI to approach break-even in the July-to-September quarter.

The company noted on its Q1 earnings call that Emerald and DVO have been fully integrated and that it upgraded its ERP (enterprise resource planning) systems in April, which will boost productivity visibility, particularly for architecture and engineering staffing.

On a three-year basis (2023 to 2025), our topline targets are underpinned by a 37% CAGR, led by Construction Design-build, alongside a 27% gross profit CAGR over the same period. We model for AEBITDA break-even in 2024 with the KPI climbing towards $3m in 2025, driven by topline growth and streamlined operations.

Table 5: Segment forecasting

in USDm	2022	2023E	2024E	2025E	*Three year CAGR*
Revenue					
Equipment systems	33.3	17.4	30.5	50.3	*15%*
Construction design-build	19.8	65.5	81.9	98.2	*70%*
Services	12.9	13.4	15.4	20.5	*17%*
Consumable products	1.0	0.9	1.8	2.4	*33%*
Group	**67.0**	**97.2**	**129.6**	**171.4**	***37%***
Y/Y growth					
Equipment systems	-40%	-48%	75%	65%	-
Construction design-build	n.a.	230%	25%	20%	-
Services	155%	4%	15%	33%	-
Consumable products	-33%	-14%	110%	30%	-
Group	**8%**	**45%**	**33%**	**32%**	**-**
Gross profit					
Equipment systems	5.4	2.7	4.9	8.2	*15%*
Margin	*16%*	*15%*	*16%*	*16%*	-
Construction design-build	1.9	6.1	7.9	9.5	*71%*
Margin	*10%*	*9%*	*10%*	*10%*	-
Services	6.6	6.5	7.9	10.5	*16%*
Margin	*52%*	*48%*	*51%*	*51%*	-
Consumable products	0.3	0.2	0.5	0.7	*33%*
Margin	*28%*	*27%*	*27%*	*28%*	-
Group	**14.2**	**15.5**	**21.2**	**28.9**	***27%***
Margin	*21.2%*	*16%*	*16%*	*17%*	-

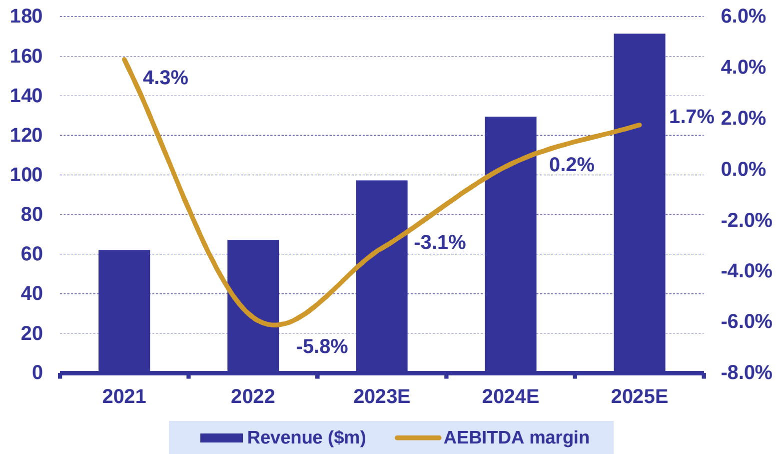
Source: First Berlin Equity Research; urban-gro

Gross margin upside lately gated by cannabis slowdown The gross margin dipped to 21% in 2022 on: (1) margin pressure for the Equipment Systems segment; and (2) the mid-year addition of the lower margin Construction Design-build business to the group revenue mix. The latter will have a full year impact on the gross margin this year, and we look for the KPI to settle at ~16% this year. Upside will be limited near term by the expected growth of Construction Design-build operations, but a pickup in cannabis customer CapEx spend could improve the higher margin Equipment Systems and Services activities. We thus see upward scope towards 19% to 20% over the medium term.

Operating expense considerations These reflect standard administration, marketing, legal, personnel, and other overhead costs for running operations. Plus, the company incentivises key staff and directors with a stock-based compensation program. We model other operating expenses at 22% of sales this year with the KPI declining to 18% in 2024 on scale effects and lower corporate activity costs.

Scale effects visible at AEBITDA level We regard adjusted AEBITDA as the key operating indicator to gauge UG's profitability, due to the high stock-based compensation expenses, acquisition costs, and other frequent non-recurring operating expenses that impact operating income (EBIT). Management pulled the M&A lever twice last year to drive growth and improve the strategic position, and we expect management to opportunistically use corporate activity for future expansion, particularly in the EU over the mid-term. We look for the mid-term AEBITDA margin to hover around 4% and 6% once operations hit their stride.

Figure 19: Revenue and AEBITDA margin developments

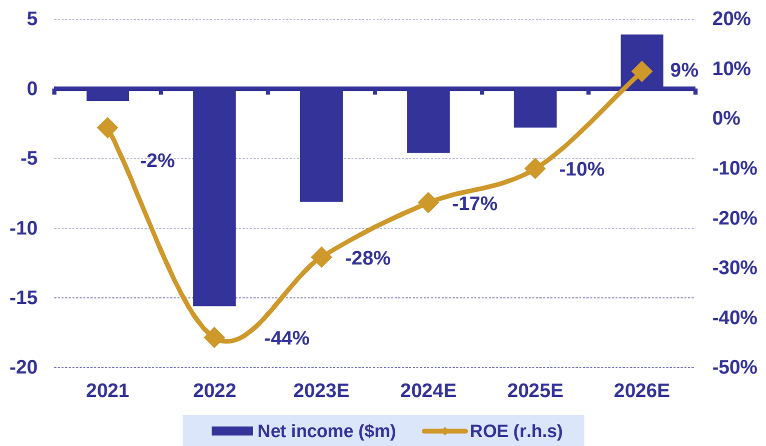


Source: First Berlin Equity Research estimates; urban-gro

URBAN-GRO'S RISING PROFITABILITY WILL DRIVE RETURNS

Although investors have been concerned about the history of loss making, we believe the expanded business platform and suite of services will help the company turn the corner. We look for UG to break even at the AEBITDA level in 2024 and achieve a positive bottom line in 2026. On our numbers, the company should also start generating positive free cash flows in 2025.

Figure 20: NI & ROE developments for urban-gro



Source: First Berlin Equity Research estimates; urban-gro

BALANCE SHEET

Working capital spiked the past two years in the wake of acquisitions, but we expect this to normalise going forward and look for the business to run at a 3% to 4% WC / sales ratio. Most of the AR balance is coupled to construction projects, the company's largest segment, while accounts payable (AP) follows a "pay when paid" arrangement meaning DPO will be closely aligned with the DSO calculation. Operations do not require any inventory build-up.

Asset-light business model urban-gro's business is people driven with no need for expensive machinery, while maintenance CapEx is also low for the company and chiefly covers IT needs as well as other fixtures at corporate facilities. The company has ample room for personnel expansion at its home office in Denver, Colorado to facilitate the growing business.

No imminent financing needs The company replenished its financial coffers in 2021 with a share issuance for net proceeds at $58m in conjunction with its public offering and Nasdaq listing, which helped finance the external growth with the DVO and Emerald deals.

Investors have lately been concerned about the dwindling liquidity position with profitability still below acceptable levels. However, we believe we are close to a trough in terms of earnings. Plus, the company should be able to convert a large Fortune 50 receivable into ~$8.5m in cash in the coming months, while overall WC needs should begin to ease up.

The company exited Q1 with some $7.3m in cash. All said, much will hinge on how short the path to profitability is for urban-gro. We believe management are highly focused on improving earnings to avoid what would be a massive down round, if the company needs to tap the equity markets while the stock trades anywhere close to current levels.

The capital structure contains a promissory note (Q1: $2.9m) related to the DVO acquisition that is reduced quarterly, Otherwise, urban-gro carries no financial debt on its balance sheet, and we expect this capital structure to persist going forward.

MANAGEMENT BOARD

Chief Executive Officer

Mr Bradley Nattrass is an urban-gro founder. He has served as CEO and Chairperson of the Board since March 2017 following a stint as Managing Member from March 2014 until March 2017. From October 2015 to August 2016, Mr Nattrass was the Managing Member of enviro-glo, LLC, a Colorado-based manufacturer of branded commercial lighting products. Previously, he was the Managing Member of the Colorado based commercial lighting distributor, Bravo Lighting, LLC. Mr Nattrass holds a Bachelor of Commerce degree from the University of Calgary in marketing and received a Master of Business Administration from the University of Phoenix in 2001.

Chief Financial Officer

Mr Dick Akright joined urban-gro as CFO in August 2019. With over 30 years' experience in managing director and CFO roles, he combines financial expertise with backgrounds in business development, operations, and P&L management to develop effective strategies to support urban-gro's corporate objectives. Mr Akright received his MBA from Colorado State University and holds a Bachelor of Science in Accounting from Western Illinois University.

Chief Operating Officer

Mr JT Archer serves as COO and has a successful track record in building effective and cost-efficient organizations. He presently oversees operations across all business units and disciplines. Prior to joining urban-gro in 2022 as the Executive Vice President of Business Operations and Chief of Staff, Mr Archer worked in construction and real estate development with a large cannabis MSO (multi-state operator). His background also includes executive leadership roles in the technology, software, and telecom sectors.

His vast experience in strategic planning, mergers and acquisitions, development and construction management, and organisational optimisation is key to the achievement of the company's business objectives. Mr Archer graduated from Metropolitan State University in Denver, Colorado with a degree in business and also received a master's in management from the University of Colorado, Denver.

SHAREHOLDERS & STOCK INFORMATION

Stock Information	
ISIN	US91704K2024
WKN	A2QN2U
Bloomberg ticker	UGRO US
No. of issued shares	10,938k
Transparency Standard	Nasdaq
Country	United States
Sector	EPC
Subsector	Cultivation

Source: Börse Frankfurt, First Berlin Equity Research

Shareholder Structure	
Insiders	28.9%
Institutional Holdings	28.0%
Free Float	43.1%

Source: urban-gro, Inc.

INCOME STATEMENT

All figures in USD '000	2020	2021	2022	2023E	2024E	2025E
Revenues	**25,838**	**62,113**	**67,030**	**97,192**	**129,588**	**171,407**
Cost of goods sold	-20,122	-47,353	-52,824	-81,685	-108,404	-142,494
Gross profit	**5,716**	**14,760**	**14,206**	**15,507**	**21,184**	**28,912**
SG&A	-6,658	-13,124	-20,971	-20,896	-23,067	-28,282
Stock-based compensation	-1,803	-1,841	-2,572	-2,527	-2,721	-3,428
Operating income (EBIT)	**-2,746**	**-205**	**-12,637**	**-7,916**	**-4,604**	**-2,798**
Net financial result	-1,498	-334	274	-192	0	0
Other non-operating result	-831	-337	-577	0	0	0
Impairment loss	0	0	-2,661	0	0	0
Pre-tax income (EBT)	**-5,074**	**-876**	**-15,600**	**-8,108**	**-4,604**	**-2,798**
Income taxes	0	0	322	0	0	0
Minority interests	0	0	0	0	0	0
Net income / loss	**-5,074**	**-876**	**-15,278**	**-8,108**	**-4,604**	**-2,798**
Diluted EPS (in $)	**-1.06**	**-0.09**	**-1.44**	**-0.81**	**-0.46**	**-0.28**
AEBITDA	**-652**	**2,679**	**-3,904**	**-3,014**	**265**	**2,987**
Ratios						
Gross margin	22.1%	23.8%	21.2%	16.0%	16.3%	16.9%
EBIT margin	-10.6%	-0.3%	-18.9%	-8.1%	-3.6%	-1.6%
AEBITDA margin	-2.5%	4.3%	-5.8%	-3.1%	0.2%	1.7%
Net margin	-19.6%	-1.4%	-22.8%	-8.3%	-3.6%	-1.6%
Tax rate	15.0%	21.0%	21.0%	21.0%	21.0%	21.0%
Expenses as % of revenues						
SG&A	25.8%	21.1%	31.3%	21.5%	17.8%	16.5%
Stock-based compensation	7.0%	3.0%	3.8%	2.6%	2.1%	2.0%
Y-Y Growth						
Revenues	6.8%	140.4%	7.9%	45.0%	33.3%	32.3%
Operating income	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.
Net income/ loss	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.

BALANCE SHEET

All figures in USD '000	2020	2021	2022	2023E	2024E	2025E
Assets						
Current assets, total	**5,245**	**59,480**	**34,558**	**23,446**	**25,175**	**30,338**
Cash and equivalents	185	34,591	12,008	6,558	4,913	5,737
Trade receivables	915	13,126	15,380	9,320	12,426	16,436
Inventories	537	515	320	671	891	1,171
Other ST assets	3,609	11,248	6,849	6,897	6,945	6,994
Non-current assets, total	**2,915**	**14,675**	**27,508**	**27,472**	**27,667**	**27,909**
Property, plant & equipment	129	208	1,307	1,317	1,330	1,347
Goodw ill & other intangibles	991	9,568	21,023	20,926	21,055	21,227
Financial assets	1,710	4,210	2,559	2,585	2,611	2,637
Other LT assets	85	690	2,619	2,645	2,671	2,698
Total assets	**8,161**	**74,155**	**62,066**	**50,918**	**52,842**	**58,246**
Shareholders' equity & debt						
Current liabilities, total	**14,546**	**25,005**	**24,256**	**18,555**	**22,223**	**26,851**
Trade payables	654	6,067	9,960	6,714	8,910	11,712
ST debt	5,271	0	0	0	0	0
Customer deposits	4,879	13,345	2,571	3,728	4,971	6,561
Provisions	1,799	3,878	3,197	3,325	3,458	3,596
Other current liabilities	1,944	1,716	8,527	4,788	4,884	4,982
Long-term liabilities, total	**1,021**	**983**	**3,078**	**3,212**	**3,351**	**3,496**
Long-term debt	1,021	0	0	0	0	0
Deferred tax liabilities	0	441	1,033	1,085	1,139	1,196
Other non-current liabilities	0	542	2,045	2,127	2,212	2,300
Shareholders' equity	**-7,406**	**48,167**	**34,732**	**29,151**	**27,268**	**27,899**
Total consolidated equity and debt	**8,161**	**74,155**	**62,066**	**50,918**	**52,842**	**58,246**
Ratios						
Current ratio (x)	0.4	2.4	1.4	1.3	1.1	1.1
Quick ratio (x)	0.3	2.4	1.4	1.2	1.1	1.1
Equity ratio	-91%	65%	56%	57%	52%	48%
Net debt	6,197	-34,591	-8,175	-6,558	-4,913	-5,737
Net debt / EBITDA (x)	-9.5	-12.9	2.1	2.2	-18.5	-1.9
Net gearing	-84%	-72%	-24%	-22%	-18%	-21%
Return on equity (ROE)	69%	-2%	-44%	-28%	-17%	-10%
Capital employed (CE)	1,016	9,357	12,498	9,948	11,220	12,897
Return on capital employed (ROCE)	-270%	-2%	-101%	-80%	-41%	-22%

CASH FLOW STATEMENT

All figures in USD '000	2020	2021	2022	2023E	2024E	2025E
Net income	**-5,074**	**-876**	**-15,278**	**-8,108**	**-4,604**	**-2,798**
Depreciation and amortisation	258	495	1,483	875	648	857
Amortisation of financing instruments	558	104	0	0	0	0
Stock-based compensation	1,803	1,841	2,572	2,527	2,721	3,428
Other non-cash items	1,016	500	3,427	0	0	0
Tax result	0	0	-322	0	0	0
Net interest expense	0	0	-274	192	0	0
Operating cash flow	**-1,438**	**2,064**	**-8,393**	**-4,514**	**-1,235**	**1,487**
Change in working capital	-2,195	-3,628	-4,220	68	406	408
Tax paid	0	0	0	0	0	0
Net operating cash flow	**-3,633**	**-1,564**	**-12,613**	**-4,446**	**-829**	**1,896**
Cash flow from investing	**-176**	**-8,337**	**-4,452**	**-813**	**-816**	**-1,072**
Free cash flow (FCF)	**-3,809**	**-9,901**	**-17,065**	**-5,259**	**-1,645**	**824**
Equity inflow, net	0	57,747	30	0	0	0
Debt inflow, net	4,183	-5,756	0	0	0	0
Interest expenses paid	-638	0	0	-192	0	0
Stock buyback	0	-7,684	-4,362	0	0	0
Other adjustments	0	0	-1,186	0	0	0
Cash flow from financing	**3,545**	**44,308**	**-5,518**	**-191**	**0**	**0**
Net cash flows	**-264**	**34,407**	**-22,583**	**-5,450**	**-1,645**	**824**
Cash, start of the year	449	184	34,591	12,008	6,558	4,913
Cash, end of the year	**184**	**34,591**	**12,008**	**6,558**	**4,913**	**5,737**
EBITDA/share (in $)	**-0.14**	**0.27**	**-0.37**	**-0.30**	**0.03**	**0.30**

Y-Y Growth						
Operating cash flow	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.
Free cash flow	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.
AEBITDA / share	n.m.	n.m.	n.m.	n.m.	n.m.	1027%

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First Berlin Equity Research

First Berlin Equity Research GmbH ist ein von der BaFin betreffend die Einhaltung der Pflichten des §85 Abs. 1 S. 1 WpHG, des Art. 20 Abs. 1 Marktmissbrauchsverordnung (MAR) und der Markets Financial Instruments Directive (MiFID) II, Markets in Financial Instruments Directive (MiFID) II Durchführungsverordnung und der Markets in Financial Instruments Regulations (MiFIR) beaufsichtigtes Unternehmen.

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Anschrift:
First Berlin Equity Research GmbH
Friedrichstr. 69
10117 Berlin
Germany

Vertreten durch den Geschäftsführer: Martin Bailey

Telefon: +49 (0) 30-80 93 9 680
Fax: +49 (0) 30-80 93 9 687
E-Mail: info@firstberlin.com

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First Berlin Equity Research GmbH

Authored by: Ellis Acklin, Senior Analyst
All publications of the last 12 months were authored by Ellis Acklin.

Company responsible for preparation: First Berlin Equity Research GmbH, Friedrichstraße 69, 10117 Berlin

The production of this recommendation was completed on 27 June 2023 at 11:30

Person responsible for forwarding or distributing this financial analysis: Martin Bailey

INFORMATION PURSUANT TO SECTION 85 (1) SENTENCE 1 OF THE GERMAN SECURITIES TRADING ACT [WPHG], TO ART. 20 (1) OF REGULATION (EU) NO 596/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF APRIL 16, 2014, ON MARKET ABUSE (MARKET ABUSE REGULATION) AND TO ART. 37 OF COMMISSION DELEGATED REGULATION (EU) NO 2017/565 (MIFID) II.

First Berlin Equity Research GmbH (hereinafter referred to as: “First Berlin”) prepares financial analyses while taking the relevant regulatory provisions, in particular section 85 (1) sentence 1 of the German Securities Trading Act [WpHG], art. 20 (1) of Regulation (EU) No 596/2014 of the European Parliament and of the Council of April 16, 2014, on market abuse (market abuse regulation) and art. 37 of Commission Delegated Regulation (EU) no. 2017/565 (MiFID II) into consideration. In the following First Berlin provides investors with information about the statutory provisions that are to be observed in the preparation of financial analyses.

CONFLICTS OF INTEREST

In accordance with art. 37 (1) of Commission Delegated Regulation (EU) no. 2017/565 (MiFID) II and art. 20 (1) of Regulation (EU) No 596/2014 of the European Parliament and of the Council of April 16, 2014, on market abuse (market abuse regulation) investment firms which produce, or arrange for the production of, investment research that is intended or likely to be subsequently disseminated to clients of the firm or to the public, under their own responsibility or that of a member of their group, shall ensure the implementation of all the measures set forth in accordance with Article 34 (2) lit. (b) of Regulation (EU) 2017/565 in relation to the financial analysts involved in the production of the investment research and other relevant persons whose responsibilities or business interests may conflict with the interests of the persons to whom the investment research is disseminated. In accordance with art. 34 (3) of Regulation (EU) 2017/565 the procedures and measures referred to in paragraph 2 lit. (b) of such article shall be designed to ensure that relevant persons engaged in different business activities involving a conflict of interests carry on those activities at a level of independence appropriate to the size and activities of the investment firm and of the group to which it belongs, and to the risk of damage to the interests of clients.

In addition, First Berlin shall pursuant to Article 5 of the Commission Delegated Regulation (EU) 2016/958 disclose in their recommendations all relationships and circumstances that may reasonably be expected to impair the objectivity of the financial analyses, including interests or conflicts of interest, on their part or on the part of any natural or legal person working for them under a contract, including a contract of employment, or otherwise, who was involved in producing financial analyses, concerning any financial instrument or the issuer to which the recommendation directly or indirectly relates.

With regard to the financial analyses of urban-gro, Inc. the following relationships and circumstances exist which may reasonably be expected to impair the objectivity of the financial analyses: The author, First Berlin, or a company associated with First Berlin reached an agreement with the urban-gro, Inc. for preparation of a financial analysis for which remuneration is owed.

Furthermore, First Berlin offers a range of services that go beyond the preparation of financial analyses. Although First Berlin strives to avoid conflicts of interest wherever possible, First Berlin may maintain the following relations with the analysed company, which in particular may constitute a potential conflict of interest:

- The author, First Berlin, or a company associated with First Berlin owns a net long or short position exceeding the threshold of 0.5 % of the total issued share capital of the analysed company;
- The author, First Berlin, or a company associated with First Berlin holds an interest of more than five percent in the share capital of the analysed company;

- The author, First Berlin, or a company associated with First Berlin provided investment banking or consulting services for the analysed company within the past twelve months for which remuneration was or was to be paid;
- The author, First Berlin, or a company associated with First Berlin reached an agreement with the analysed company for preparation of a financial analysis for which remuneration is owed;
- The author, First Berlin, or a company associated with First Berlin has other significant financial interests in the analysed company;

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With regard to the financial analyses of urban-gro, Inc. the following of the aforementioned potential conflicts of interests or the potential conflicts of interest mentioned in Article 6 paragraph 1 of the Commission Delegated Regulation (EU) 2016/958 exist: The author, First Berlin, or a company associated with First Berlin reached an agreement with the urban-gro, Inc. for preparation of a financial analysis for which remuneration is owed.

In order to avoid and, if necessary, manage possible conflicts of interest both the author of the financial analysis and First Berlin shall be obliged to neither hold nor in any way trade the securities of the company analyzed. The remuneration of the author of the financial analysis stands in no direct or indirect connection with the recommendations or opinions represented in the financial analysis. Furthermore, the remuneration of the author of the financial analysis is neither coupled directly to financial transactions nor to stock exchange trading volume or asset management fees.

INFORMATION PURSUANT TO SECTION 64 OF THE GERMAN SECURITIES TRADING ACT [WPHG], DIRECTIVE 2014/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 15 MAY 2014 ON MARKETS IN FINANCIAL INSTRUMENTS AND AMENDING DIRECTIVE 2002/92/EC AND DIRECTIVE 2011/61/EU, ACCOMPANIED BY THE MARKETS IN FINANCIAL INSTRUMENTS REGULATION (MIFIR, REG. EU NO. 600/2014).

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PRICE TARGET DATES

Unless otherwise indicated, current prices refer to the closing prices of the previous trading day.

AGREEMENT WITH THE ANALYSED COMPANY AND MAINTENANCE OF OBJECTIVITY

The present financial analysis is based on the author's own knowledge and research. The author prepared this study without any direct or indirect influence exerted on the part of the analysed company. Parts of the financial analysis were possibly provided to the analysed company prior to publication in order to avoid inaccuracies in the representation of facts. However, no substantial changes were made at the request of the analysed company following any such provision.

ASSET VALUATION SYSTEM

First Berlin's system for asset valuation is divided into an asset recommendation and a risk assessment.

ASSET RECOMMENDATION

The recommendations determined in accordance with the share price trend anticipated by First Berlin in the respectively indicated investment period are as follows:

Category		1	2
Current market capitalisation (in €)		0 - 2 billion	> 2 billion
Strong Buy[1]	An expected favourable price trend of:	> 50%	> 30%
Buy	An expected favourable price trend of:	> 25%	> 15%
Add	An expected favourable price trend of:	0% to 25%	0% to 15%
Reduce	An expected negative price trend of:	0% to -15%	0% to -10%
Sell	An expected negative price trend of:	< -15%	< -10%

[1] The expected price trend is in combination with sizable confidence in the quality and forecast security of management.

Our recommendation system places each company into one of two market capitalisation categories. Category 1 companies have a market capitalisation of €0 – €2 billion, and Category 2 companies have a market capitalisation of > €2 billion. The expected return thresholds underlying our recommendation system are lower for Category 2 companies than for Category 1 companies. This reflects the generally lower level of risk associated with higher market capitalisation companies.

RISK ASSESSMENT

The First Berlin categories for risk assessment are low, average, high and speculative. They are determined by ten factors: Corporate governance, quality of earnings, management strength, balance sheet and financial risk, competitive position, standard of financial disclosure, regulatory and political uncertainty, strength of brandname, market capitalisation and free float. These risk factors are incorporated into the First Berlin valuation models and are thus included in the target prices. First Berlin customers may request the models.

RECOMMENDATION & PRICE TARGET HISTORY

Report No.:	Date of publication	Previous day closing price	Recommendation	Price target
Initial Report	27 June 2023	$1.21	Buy	$7.00

INVESTMENT HORIZON

Unless otherwise stated in the financial analysis, the ratings refer to an investment period of twelve months.

UPDATES

At the time of publication of this financial analysis it is not certain whether, when and on what occasion an update will be provided. In general First Berlin strives to review the financial analysis for its topicality and, if required, to update it in a very timely manner in connection with the reporting obligations of the analysed company or on the occasion of ad hoc notifications.

SUBJECT TO CHANGE

The opinions contained in the financial analysis reflect the assessment of the author on the day of publication of the financial analysis. The author of the financial analysis reserves the right to change such opinion without prior notification.

Legally required information regarding

- **key sources of information in the preparation of this research report**

- **valuation methods and principles**
- **sensitivity of valuation parameters**

can be accessed through the following internet link: https://firstberlin.com/disclaimer-english-link/

SUPERVISORY AUTHORITY: Bundesanstalt für Finanzdienstleistungsaufsicht (German Federal Financial Supervisory Authority) [BaFin], Graurheindorferstraße 108, 53117 Bonn and Marie-Curie-Straße 24-28, 60439 Frankfurt am Main

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