ELMİ TƏDQİQAT Oktyabr 2026, Cild: 6, Sayı: 10, s. 233–242
SCIENTIFIC RESEARCH October 2026, Volume: 6, Issue: 10, pp. 233–242
DOI: https://doi.org/10.36719/2789-6919/64/233-242

From Sustainability Claims to Assessable Responsibility: An Evidence-Alignment Analysis of Vertical Farming Organisations

Aziz Abilzade Shahin

Abstract. *Vertical farming is often associated with local food and efficient resource use, but neither characteristic establishes corporate social responsibility (CSR). This article develops a claim–practice–outcome evidence-alignment framework through a secondary, document-based synthesis of a 2026 doctoral thesis drawing on nine interviews and five site observations undertaken in Hungary in 2023–2024. The article does not present new fieldwork or independent recoding of interview transcripts. It selects eight attributed interview extracts and five case-specific observation summaries using explicit inclusion rules, and compares them across operational embeddedness, stakeholder inclusion and outcome verification. The comparison identifies three distinct evidence gaps: observed technical practice without comparable impact measurement; commercially targeted local production without demonstrated wider affordability; and stated social or ethical commitments without independent beneficiary perspectives. The contribution is an auditable diagnostic for evaluating CSR-related claims, not a ranking of firms or a measured assessment of their sustainability performance. The findings remain limited to the documentary evidence reviewed.*

Keywords: *vertical farming, corporate social responsibility, qualitative secondary analysis, evidence alignment, stakeholder inclusion, operational practice*

The University of Buckingham, PhD (Business and Management), Buckingham, United Kingdom
E-mail: azizabilzadephd@proton.me
Received: 10 July 2026; Accepted: 16 October 2026; Published online: 30 October 2026
© The Author(s) 2026. This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (CC BY-NC 4.0).

Dayanıqlılıq iddialarından qiymətləndirilə bilən məsuliyyətə: vertikal əkinçilik təşkilatlarında sübutların uyğunluğunun təhlili

Əziz Əbilzadə Şahin

Xülasə. *Vertikal əkinçiliyin yerli qida istehsalı və resurslardan səmərəli istifadə ilə əlaqələndirilməsi həmin fəaliyyətin korporativ sosial məsuliyyət (KSM) nəticələrini avtomatik təsdiqləmir. Məqalədə 2026-cı il doktorluq dissertasiyasında təqdim edilmiş, Macarıstanda 2023–2024-cü illərdə toplanmış doqquz müsahibə və beş müəssisə müşahidəsi əsasında ikinci dərəcəli sənəd təhlili aparılır. Yeni müsahibələr keçirilməmiş, ilkin transkriptlər müstəqil şəkildə yenidən analiz edilmişdir. Səkkiz iştirakçı sitatı və beş müşahidə təsviri əvvəlcədən müəyyənləşdirilmiş seçmə meyarları ilə araşdırılmış, məlumatlar təşkilati*

fəaliyyət, maraqlı tərəflərin iştirakı və nəticələrin yoxlanması istiqamətlərində müqayisə edilmişdir. Məqalənin dissertasiyadan fərqlənən analitik töhfəsi iddia, müşahidə olunan praktika və təsdiqlənmiş nəticə arasında uyğunluğu qiymətləndirən çərçivənin hazırlanmasıdır. Təhlil texniki əməliyyatların müşahidəsi ilə ekoloji nəticələrin ölçülməsi, yerli istehsal ilə sosial əlçatanlıq, eləcə də KSM niyyətləri ilə maraqlı tərəflərin birbaşa qiymətləndirməsi arasında üç əsas sübut boşluğunu üzə çıxarır. İstehsal sistemlərinin müxtəlifliyi eyni texnoloji anlayış altında fəaliyyət göstərən təşkilatların sosial və ekoloji təsirlərinin fərqli üsullarla qiymətləndirilməsini zəruri edir. Təşkilat nümayəndələrinin bəyanatları müstəqil maliyyə sənədləri, resurs ölçmələri və benefisiarların ifadələri ilə təsdiqlənmədiyindən, nəticələr müəssisələrin reytinqi və ya dayanıqlılığın ölçülmüş göstəriciləri kimi deyil, mövcud sübutların sərhədlərini göstərən analitik şərhlər kimi təqdim olunur.

Açar sözlər: *vertikal əkinçilik, korporativ sosial məsuliyyət, ikinci dərəcəli keyfiyyət təhlili, sübutların uyğunluğu, maraqlı tərəflər*

Bakingem Universiteti, PhD (Biznes və İdarəetmə), Bakingem, Böyük Britaniya
E-poçt: azizabilzadephd@proton.me
Daxil oldu: 10 İyul 2026; Qəbul edildi: 16 Oktyabr 2026; Onlayn dərc edildi: 30 Oktyabr 2026
© Müəllif(lər) 2026. Bu açıq girişli məqalə Creative Commons Attribution–NonCommercial 4.0 Beynəlxalq Lisenziyasının (CC BY-NC 4.0) şərtlərinə uyğun olaraq yayımlanmışdır.

Introduction

Corporate social responsibility (CSR) in agri-food concerns how firms organise production, allocate risks and respond to affected groups. Environmental technologies can make a production process more controllable without establishing who benefits, who bears the costs or whether its aggregate impacts improve. CSR assessment therefore requires more than an account of technical capabilities or charitable intent (Hartmann, 2011). Vertical farming (VF) is an instructive setting because its organisational forms are heterogeneous. Stacked hydroponic research facilities, rotating towers, equipment providers, experimental space-agriculture units and small urban microgreen producers operate with different purposes, resource demands and markets. Treating these arrangements as one technological category risks transferring a claimed benefit from one configuration to another without evidence (Beacham et al., 2019). The variation also reflects the context-sensitive character of agri-food CSR discussed by Luhmann and Theuvsen (2016).

CSR theory distinguishes instrumental, integrative and ethical rationales, but an organisation may pursue revenue, environmental goals and social commitments simultaneously. Mixed motives alone neither validate responsible performance nor prove misleading communication. A stronger question is how a stated intention is connected to identifiable organisational practice and to an outcome that can be examined independently (Garriga & Melé, 2004). The doctoral thesis on which this article draws produced five themes spanning global challenges, VF configurations, adoption constraints, CSR and future collaboration. The present article does not re-present those themes as new empirical discoveries. It asks a narrower, article-specific question: when organisational representatives link VF to CSR, how far can the link be followed from a reported claim, through an observed operational process, to evidence concerning environmental or stakeholder outcomes? Its original contribution is a cross-case diagnostic of evidence alignment, including the circumstances in which available material does not support an impact claim. This is an analytic synthesis of documented findings, not a second independent field study (Abilzade, 2026).

Methods

Source study, sampling and actor roles

The source is the author's doctoral thesis, completed in July 2026. Its exploratory, abductive study involved nine semi-structured interviews with representatives of nine Hungary-based VF-related organisations in 2023–2024. Seven interviews took place on-site and two online; non-participant, guide-assisted observations were undertaken at five of the nine organisations. Two pilot interviews were retained within the final interview dataset, not added to the reported sample. The original research used Braun and Clarke's reflexive thematic approach (2006, 2019), supported by Delve, moving from 581 initial codes to 54 categories, 37 refined categories and five themes. Those counts describe the doctoral analysis only and are not presented as coding performed for this article (Abilzade, 2026, s. 88–107).

The thesis specifies heterogeneous purposive sampling with iterative expansion. Inclusion required (i) direct involvement in VF production, technology provision, research or education; (ii) explicit or emerging CSR/sustainability relevance; (iii) activities connected with Hungary; and (iv) the ability to describe VF technology, markets or societal and environmental implications. The sampling frame was broadened from an initially envisaged four cases to nine as relevant actors emerged. This design captures different positions in a small field rather than a statistically representative set of producers (Abilzade, 2026, s. 87–92).

Table 1
Source-study participants and their analytical roles

Code / pseudonym	Position / actor function	Interview mode	Site observation
#1 Techlight	CSR and communications expert; electronics manufacturer / VF research	Online	No
#2 Sun	Managing director; VF research and development	On-site	Yes
#3 Light for Greens	CEO; lighting and control technology supplier	Online	No
#4 Tower	CEO; hydroponic tower-system developer/operator	On-site	Yes
#5 CoreGreen	Co-founder; commercial hydroponic herbs/microgreens	On-site	Yes
#6 AstroAgro	Co-founder; space-oriented VF prototype / research	On-site	Yes
#7 Grow	CEO; indoor cultivation equipment / training supplier	On-site	No
#8 Agriculture University	Associate professor; VF research / education	On-site	No
#9 UrbanLeaf	Founder; urban microgreens for hospitality customers	On-site	Yes

Source. Organisational roles and observation coverage transcribed from the doctoral thesis (Abilzade, 2026, s. 88–92, especially the sample overview on s. 92).

The roles in Table 1 are analytically consequential. Statements by suppliers (#1, #3 and #7) concern enabling technology, markets or CSR communication; producers and operators (#4, #5 and #9) can discuss routine cultivation and buyers; research-oriented actors (#2 and #6) describe pilot or experimental capacities; and the university participant (#8) contributes sector expertise rather than firm-level CSR performance. These accounts cannot be pooled as interchangeable evidence of commercial farm results. The observation subset is analysed for practice-level verification; the other four organisations are retained only for interview-based context.

Article-specific documentary selection and synthesis

This article uses the thesis as a bounded documentary corpus. For provenance, its methodology chapter (especially s. 87–117) was consulted; case-level descriptions were inspected in the original results sections on observed sites (s. 136–161), organisational and economic factors (s. 170–189), and CSR (s. 190–222). The thesis's later CSR discussion (s. 263–272) was used to check the original interpretation, not counted as additional independent field evidence. General background literature, third-party anecdotes, hypothetical policy measures and future technology plans were excluded from the evidentiary extract set unless clearly labelled as contextual or prospective. A documentary evidence unit was retained only where the thesis provides a case or interviewee identifier, a traceable page, and information directly relevant to at least one of three comparisons: (a) an environmental or technical practice versus an impact claim; (b) operating viability versus social access; or (c) declared CSR purpose versus stakeholder involvement. To avoid giving the appearance of a new survey or a second thematic analysis, the working set was deliberately limited to five case-specific observational descriptions (O1–O5, one per visited facility) and eight verbatim thesis-published excerpts (Q1–Q8, from six interviewees). Appendix A records each unit, page and use. Selection reflects conceptual relevance and contrasting cases, not frequency or representativeness; an excerpt may inform more than one comparison.

The procedure was: first, separate interview claims (Q units) from documented site configurations (O units); second, compare matched claims with observable equipment and routines wherever a site visit occurred; third, classify the strength of the supporting material by the criteria in Table 2; and fourth, examine whether negative cases or actor-role differences qualify a general claim. Three cross-cutting evidence gaps were then formulated from this matrix. These are new article-level interpretive categories, not additional themes statistically extracted from the original 581 codes. No raw audio, independent transcript recoding, audited accounts, consumer interviews or life-cycle measurements were used in this article.

Operational criteria and inferential boundaries

Table 2
Indicators used to assess the evidential status of CSR claims

Analytic dimension	Positive indicator in available material	What cannot be concluded without further data
Operational embeddedness	Identifiable action already implemented in daily production; corroboration through a case-specific observation or documented practice. Plans and value statements remain reported intentions.	Observed recirculation, lighting or hygiene cannot by itself establish lower life-cycle impact, labour quality or sector-wide performance.

Analytic dimension	Positive indicator in available material	What cannot be concluded without further data
Stakeholder inclusion	Named stakeholder group plus an actual engagement route (e.g., teaching, consultation, access or distribution); label as reported unless the group itself is interviewed or an independent record is available.	A manager's description is not direct testimony from workers, consumers or local residents, nor proof of improved access.
Evidence-based evaluation	Specified indicator, measurement period, comparator/system boundary and traceable record for environmental, financial or social results.	Without records, a claimed saving, profitability or social benefit remains unverified even where the activity itself is visible.

Source. Article-specific operational definitions developed through documentary comparison of Abilzade (2026).

Three evidential labels are used consistently. "Reported" refers to a participant account reproduced in the thesis; "observed" refers to configuration or routines described in its site observations; "outcome verified" is reserved for traceable measurement or direct stakeholder evidence. Because the available corpus does not provide comparable financial accounts, energy or water balances, life-cycle assessments or first-person statements from external beneficiaries, this article does not award a case the final label. This restriction is part of the analytical result rather than a judgment that the firms made no contribution.

Ethics, provenance and access

The parent thesis reports review through university ethics procedures, the use of IBS research ethics documentation, participant information sheets and consent forms, and consent for interviews, recordings and anonymised research reporting. Organisational pseudonyms and interviewee numbers are retained here. The available thesis text does not specify an ethics committee's formal name, approval date or reference number, so these details are not asserted. Whether the initial consent expressly permits quotation in a separate journal article must be checked against the original signed documents before publication (Abilzade, 2026, s. 116–117). The quotations below are reproduced from the thesis text rather than verified anew against original audio or transcripts. Their English wording is therefore treated as thesis-reported text; the original interview language and duration cannot be independently established from the thesis. No public institutional repository URL for the thesis was verified for this revision. The full citation is included below; requests concerning access to the thesis or supporting anonymised material should be addressed to the corresponding author and evaluated under consent, confidentiality and institutional restrictions.

Results

1. Observed operations do not, by themselves, verify environmental impact

Five site descriptions allow a limited comparison between physical production configurations and sustainability-related claims. Sun's facility included recirculating hydroponic supply and automated controls; Tower used rotating hydroponic units and a recirculating nutrient circuit; CoreGreen used stacked production with parallel nutrient delivery; AstroAgro demonstrated an enclosed, sensor-based

experimental prototype; and UrbanLeaf relied on substrate trays and manual, non-recirculating watering. These are differences in actual configurations, not estimates of comparative water, energy or carbon efficiency (Abilzade, 2026, s. 136–161).

Table 3
Cross-case comparison of practice, claim and missing outcome evidence

Observed case	Practice recorded at the site	CSR-relevant interpretation / account	Outcome not verified by source data
Sun (O1; #2)	Automated stacked hydroponics; nutrient and water recirculation; controlled access.	Research-based process control; feasibility depends on context.	Water saved per kg, full energy balance, environmental footprint.
Tower (O2; #4)	Rotating towers; nutrient recirculation; manual harvest.	Modular local cultivation and potential educational use.	Quantified resource savings or external beneficiary impact.
CoreGreen (O3; #5)	Stacked cultivation with parallel nutrient distribution.	Commercial production alongside stated ethical commitments.	Audited profits and independently evidenced stakeholder effects.
AstroAgro (O4; #6)	Programmable enclosed space-agriculture prototype and sensors.	Research transfer and controlled production potential.	Commercial-scale or societal impact of the prototype.
UrbanLeaf (O5; #9)	Shelves and substrate trays; LED lighting; manual, non-recirculating irrigation.	Local microgreens supply for restaurants and catering.	Household affordability, comparable life-cycle results, community impact.

Source. New cross-case comparison constructed from observation descriptions in Abilzade (2026, s. 136–161), combined with attributed interviews on s. 172–199.

The case contrast changes the inference one can draw from a technological label. A visible recirculation loop at Sun or Tower supports the modest statement that a closed-water practice was implemented at those sites. UrbanLeaf is a negative case for the generalisation that all VF installations recirculate irrigation water. None of the five observation summaries supplies a common functional unit, system boundary or comparator that would permit an overall environmental ranking. Thus the first gap is between observable process design and measured environmental consequence. This restriction is consistent with the contextual view of Interviewee #2 (Sun), who stated: “The first is always the feasibility- if vertical farming is suitable for a community or even for a country” (Q1; Abilzade, 2026, s. 172). The quotation is a practitioner’s assessment of feasibility, not empirical proof that one system is preferable in all settings. Environmental life-cycle research reinforces why electricity, materials and

transport must be evaluated together, although the Swedish system assessed by Martin and Molin (2019) cannot serve as a direct quantitative comparator for these Hungarian sites.

2. Business viability and local production do not demonstrate inclusive food access

A second gap arises when production and sales claims are interpreted as social outcomes. Interviewee #3 (Light for Greens) described entry into VF as "a massive initial investment to get into" (Q2; Abilzade, 2026, s. 173). This statement comes from a technology supplier and therefore informs perceived adoption barriers, not the documented accounts of a particular farm. Interviewee #5 (CoreGreen), by contrast, recalled that several advisers had doubted the venture and concluded: "And we are profitable" (Q3; Abilzade, 2026, s. 174). The two accounts are not necessarily inconsistent: one describes sectoral entry costs, while the other reports one firm's position. Neither is an independently audited financial finding. At UrbanLeaf, the participant described a different operational exposure: "If I don't turn the light on for one day, they die. Or if we have a blackout for one day, they die" (Q4, Interviewee #9; Abilzade, 2026, s. 176). This account identifies the potential vulnerability of a production model dependent on timely lighting, but the source provides no measured outage losses or comparison with field agriculture. The site observation documents simple equipment and non-recirculating water use, which complicates any assumption that automation and closed-loop irrigation are inherent features of small VF enterprises. UrbanLeaf's position was also explicitly selective in market terms: "There are people who are not price sensitive. That's our target group" (Q5, Interviewee #9; Abilzade, 2026, s. 185). The university respondent, Interviewee #8, likewise reported that "In Hungary, customers mostly care about the price" (Q6; Abilzade, 2026, s. 199), and characterised the value-oriented segment as small. These are participant perspectives, not a representative consumer survey. Together they explain why a short supply chain and a premium hospitality market can coexist without demonstrating improved affordability for low-income households. The second gap is therefore between local availability and independently evidenced social accessibility.

3. Ethical intention and stakeholder outcomes remain different evidential categories

A third gap concerns the move from organisational purpose to documented beneficiary effects. Interviewee #1 (Techlight) described a shift in CSR discourse: "CSR became a bit wider… companies started to build strategies connected to their sector" (Q7; Abilzade, 2026, s. 191). Interviewee #5 (CoreGreen) offered an ethical counterpoint: "Axioms and values should be things of who you are… not a mask" (Q8; Abilzade, 2026, s. 193). These excerpts demonstrate how actors justify responsibility, but neither alone shows an externally experienced improvement.

The thesis also reports educational initiatives, reduced packaging and community-oriented activities associated with some organisations. Such accounts can identify a stakeholder group and an intended mechanism. However, in this dataset employees, consumers, schools and community beneficiaries were not directly sampled to assess effects, and site visits primarily examined production infrastructure rather than social outcomes. These initiatives are therefore described as participant-reported actions unless directly observed or independently evidenced. An absence of outcome documentation is not evidence of greenwashing, but it prevents an assertion of verified social impact and limits any claim about misleading communication (Abilzade, 2026, s. 190–222; Delmas & Burbano, 2011).

The new comparison brings these three gaps together without ordering companies by "amount of CSR". Instead, each individual claim is examined for the type of support available, the group it concerns and

the evidence still needed. Research prototypes are evaluated as prototypes; suppliers are not treated as commercial producers; and moral or strategic rationales are not confused with observed results.

LEVEL 1 | CLAIM	LEVEL 2 | PRACTICE	LEVEL 3 | OUTCOME
Attributed interview or organisational statement What is promised, valued or described?	Specific routine, infrastructure or transaction What is observable and implemented?	Indicator and affected stakeholder What changed, relative to what comparator?
Evidence label: REPORTED	Evidence label: OBSERVED (where a site visit exists)	Evidence label: VERIFIED only with independent records or stakeholder data

Figure 1

Claim–practice–outcome pathway for evaluating VF-related CSR statements

Source. Conceptual figure developed for this article from the documentary synthesis. Read left to right as an evidence question, not as a maturity score or a firm ranking.

Figure 1 replaces the doctoral thesis's qualitative CSR spectrum. That illustration located firms along strategic, hybrid and normative positions but did not establish a uniform evidence rule for each placement. Moreover, its mixed actor roles and reliance on managers' accounts make ordinal comparisons especially fragile. The present framework therefore evaluates the status of a claim rather than assigning a firm a presumed level of ethical performance. The three gaps identified above are article-specific analytical findings obtained by using that framework on the selected evidence units.

Discussion

The evidence-alignment perspective makes a distinction found in CSR theory operational for the cases reviewed. Wood (1991) separates principles, organisational responsiveness and behavioural outcomes. In the present comparison, participant statements provide insight into principles, observations show selected processes, and verified external outcomes remain largely outside the available dataset. A report of closed-loop irrigation or a values-based mission should consequently be cited as evidence of that process or stated orientation, not of its wider net effect. This perspective also clarifies why strategic and normative interpretations are not a scale of responsibility. Firms may support environmental improvement while pursuing price premiums, revenue or reputational benefits; these motivations can coexist. The analytic test is not whether commercial benefit exists, but whether a specified action is traceable and whether a claimed external benefit can be evaluated. Treating a reported commitment as proof of public benefit would collapse distinctions that stakeholder theory and CSR scholarship retain (Donaldson & Preston, 1995; Aguilera et al., 2007).

Carroll (2016) treats economic, legal, ethical and philanthropic responsibilities as concurrent rather than as stages that permit postponing the social dimensions of performance. The present cases do not refute that framework. They instead show why commercial survival, operational control and external benefit need separate indicators. Shared-value reasoning is plausible where social and business benefits actually coincide, but premium sales alone cannot establish the societal component of the shared value proposition (Porter & Kramer, 2011). The framework highlights a problem of stakeholder voice. A representative can identify employees, customers, schools or communities as important, but a representative's account

does not substitute for these groups' experiences. This matters where premium-priced local production is presented as a contribution to food access. A credible study of such a claim would require evidence about price, distribution, beneficiary characteristics or direct accounts from those affected. These data are absent from the source study, so the article identifies a question requiring investigation rather than claiming a measured equity outcome.

A similar discipline applies to environmental responsibility. Visible water recirculation, local siting and precise climate control are plausible mechanisms for particular benefits, but overall performance depends on electricity, cultivation inputs, materials, transport, production yields and the comparison system. The source observations were not designed as a life-cycle assessment or an energy audit. The article's contribution is to specify this inferential boundary, not to calculate footprints that were never recorded (Martin & Molin, 2019). The documentary nature of the analysis imposes important limits. Case selection was purposive; technology providers, research facilities, producers and an academic respondent had different opportunities to report on daily production and external effects. The eight quotations were selected for analytic contrast rather than exhaustive content coverage. The secondary reading was confined to the completed thesis; no new participant checking or independent transcript analysis occurred. The resulting framework is therefore a transparent interpretive tool that warrants testing with primary stakeholder evidence and standardised outcome measures, not an externally validated CSR index.

Conclusion

A secondary comparison of the Hungarian doctoral material points to three distinguishable evidentiary gaps: observed operating features without comparable environmental outcome data; viable or premium-positioned local production without proof of wider food accessibility; and declared CSR intentions without direct evidence from the stakeholder groups said to benefit. These are not universal characteristics of VF firms, but limitations and tensions visible in the selected material. The article's distinct contribution is a claim–practice–outcome assessment framework with explicit documentary selection, case-level traceability and conservative inference rules. It offers a way to discuss CSR integration without treating technical capability, managerial intention and measured societal effect as interchangeable. The thesis's earlier firm-level CSR spectrum is not reused as a ranking. Where practitioners suggest a role for VF alongside greenhouses, that proposition remains a context-dependent hypothesis for comparative investigation, not a conclusion established by these cases. Further research could combine audited energy and input records, a common unit of product output, real pricing and access data, and interviews with workers, buyers and community beneficiaries. Such evidence would make it possible to test whether observed practices translate into the CSR outcomes currently described mainly in organisational narratives.

Declarations

Data and source access. The re-used source is the author's July 2026 doctoral thesis, fully identified in the reference list. An independently verifiable public repository link has not been established for this manuscript. Participant recordings and original transcripts are not supplied as an open dataset. Any request for source access or anonymised extract documentation should be evaluated by the corresponding author against the original consent conditions and the institution's confidentiality rules.

Ethics. The source study reports institutional ethical review and written participant consent (Abilzade, 2026, s. 116–117). The formal committee name, approval reference and scope of consent for separate journal publication require confirmation from the original institutional ethics file; the manuscript does not invent those particulars.

References

Abilzade, A. (2026). *The future of vertical farming in corporate social responsibility and sustainability* [Doctoral thesis]. The University of Buckingham. https://www.mediafire.com/file/ups1ttbsipw9hab/Aziz_Abilzade_Final_PhD_Thesis.docx/file

Aguilera, R. V., Rupp, D. E., Williams, C. A., & Ganapathi, J. (2007). Putting the S back in corporate social responsibility: A multilevel theory of social change in organizations. *Academy of Management Review, 32*(3), 836–863. https://doi.org/10.5465/amr.2007.25275678

Beacham, A. M., Vickers, L. H., & Monaghan, J. M. (2019). Vertical farming: A summary of approaches to growing skywards. *The Journal of Horticultural Science and Biotechnology, 94*(3), 277–283. https://doi.org/10.1080/14620316.2019.1574214

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health, 11*(4), 589–597. https://doi.org/10.1080/2159676X.2019.1628806

Carroll, A. B. (2016). Carroll's pyramid of CSR: Taking another look. *International Journal of Corporate Social Responsibility, 1*, Article 3. https://doi.org/10.1186/s40991-016-0004-6

Delmas, M. A., & Burbano, V. C. (2011). The drivers of greenwashing. *California Management Review, 54*(1), 64–87. https://doi.org/10.1525/cmr.2011.54.1.64

Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *Academy of Management Review, 20*(1), 65–91. https://doi.org/10.5465/amr.1995.9503271992

Garriga, E., & Melé, D. (2004). Corporate social responsibility theories: Mapping the territory. *Journal of Business Ethics, 53*(1–2), 51–71. https://doi.org/10.1023/B:BUSI.0000039399.90587.34

Hartmann, M. (2011). Corporate social responsibility in the food sector. *European Review of Agricultural Economics, 38*(3), 297–324. https://doi.org/10.1093/erae/jbr031

Luhmann, H., & Theuvsen, L. (2016). Corporate social responsibility in agribusiness: Literature review and future research directions. *Journal of Agricultural and Environmental Ethics, 29*(4), 673–696. https://doi.org/10.1007/s10806-016-9620-0

Martin, M., & Molin, E. (2019). Environmental assessment of an urban vertical hydroponic farming system in Sweden. *Sustainability, 11*(15), Article 4124. https://doi.org/10.3390/su11154124

Porter, M. E., & Kramer, M. R. (2011). Creating shared value. *Harvard Business Review, 89*(1–2), 62–77.

Wood, D. J. (1991). Corporate social performance revisited. *Academy of Management Review, 16*(4), 691–718. https://doi.org/10.5465/amr.1991.4279616