

EMBEDDING SUSTAINABILITY IN GLOBAL EDUCATION: FROM POLICY TO PRACTICE THROUGH THE GSG GREEN SCHOOL CERTIFICATION FRAMEWORK

Vikram Balakrishnan¹; Rathin Khandhadia²; Smita Warnekar³

Global Centre for Education Excellence (GCEE), Global Schools Group, Singapore^{1,2,3}

vikram.krish@globalschools.com¹; rathin.khandhadia@globalschools.com²;
smita.warnekar@globalschools.com³

ABSTRACT

This paper outlines the design, structure, and underlying conceptual rationale of the Green School Certification (GSC), an internal sustainability assessment framework developed by the Global Schools Group (GSG) through its Global Centre for Education Excellence (GCEE). Created in response to the need for a consistent yet adaptable sustainability standard across more than 64 international campuses, the GSC conceptualises a structured approach for evaluating environmental performance, shaping behavioural norms, and fostering alignment across operations, curriculum, and community engagement. The framework is based on five core criteria: leadership culture, environmental management, curriculum integration, stakeholder outreach, and infrastructure sustainability, each operationalised through a scorecard and a tiered recognition model. Since its launch in 2024, the engagement of 18 GSG campuses offers preliminary insights into how the framework can guide institutional reflection, promote shared ownership, and stimulate cohesive sustainability practices. Perspectives from campus leaders emphasise the GSC's role in enabling alignment across diverse geographical contexts while fostering a unified sustainability culture. The paper also introduces the Green Office Certification, a complementary model designed to extend sustainability principles to GSG's administrative and corporate offices. As an internally developed framework, the GSC provides a transferable conceptual structure for educational networks seeking to embed sustainability not merely as policy, but as an operational and cultural practice capable of supporting long-term institutional change.

Keywords: *Green School Certification, sustainability assessment framework, curriculum integration, stakeholder engagement, institutional change.*

INTRODUCTION

Across education systems worldwide, sustainability has emerged as both a policy imperative and an institutional responsibility. Increasingly, schools are expected to go beyond classroom instruction and act as living models of environmental responsibility. This expectation is rooted in global frameworks such as the United Nations Sustainable Development Goals (SDGs), which place significant emphasis on the role of education in advancing sustainable development. In particular, Goal 4 on Quality Education emphasises the role of schools in promoting inclusive, equitable, and lifelong learning that supports sustainable development

and global citizenship (United Nations, 2015). More recent guidance has reinforced this direction, with UNESCO's Education for Sustainable Development: A Roadmap outlining the expectation for schools and school systems to embed sustainability through whole-institution transformation and long-term cultural change (UNESCO, 2020). However, translating these global goals into practical, campus-level action has proven uneven across contexts (Kopnina & Meijers, 2022). For international school networks operating in multiple regions, the challenge is further complicated by differences in regulatory environments, resource availability, and cultural expectations.

Global Schools Group (GSG), a Singapore-headquartered network of over 64 international schools, recognised this challenge early and responded by creating an internal assessment framework to institutionalise sustainability across its campuses (GSG, 2024). In 2024, the Global Centre for Education Excellence (GCEE) launched the Green School Certification (GSC), a structured system designed to assess, recognise, and improve sustainability practices within the group. The certification is tailored to support schools at varying levels of readiness by providing a standardised approach to evaluation while allowing for local adaptation. It enables each campus to identify its strengths and gaps, set sustainability goals, and progress through a clear pathway of continuous improvement. At its core, the GSC is intended not merely as a recognition tool, but as a mechanism to embed sustainability within daily operations, pedagogy, and school culture.

The GSC forms part of a broader organisational commitment. It complements the GSG Sustainability Policy and is aligned with the Group's 5S Approach to Sustainability, which outlines five strategic pillars for sustainability: 1. Structure and Governance, 2. Students and Learning, 3. School Management and Operations, 4. Stakeholder Connect, and 5. Skill Development (GSG, 2024). These pillars guide the integration of sustainability into governance structures, infrastructure design, staff engagement, and educational programming. While the 5S Approach to Sustainability provides strategic direction, the Green School Certification offers the operational mechanisms needed to implement those ambitions in a consistent and measurable manner. Together, they reflect a whole-of-organisation approach to sustainability that positions schools not only as educational institutions but as active contributors to the global sustainability agenda.

In developing the GSC, GSG reviewed several well-established sustainability certification models, including the Eco-Schools programme (Foundation for Environmental Education, n.d.), the LEED for Schools framework (U.S. Green Building Council, 2013), and the Green Flag Programme. In developing the GSC, GSG reviewed several well-established sustainability certification models, including the Eco-Schools programme (Foundation for Environmental Education, n.d.), the LEED for Schools framework (U.S. Green Building Council, 2013), and the Green Flag Programme. These models provided credible benchmarks and useful references during the framework design process. However, GSG saw the need to develop an internal certification that could be more directly tailored to the group's organisational structure, academic ethos, and operational systems. The goal was not to replace existing standards, but to ensure stronger alignment with internal processes and to accommodate the regulatory requirements of different geographies. Creating an in-house framework also enabled GSG to embed sustainability into its own quality assurance mechanisms, allowing for greater integration across campuses and more consistent application over time. More critically, external models often failed to generate internal ownership or lasting behavioural change. In many cases, certification became a compliance activity rather than a

process of capacity-building. The GSC was designed to address these limitations by placing internal leadership and accountability at the centre of the framework, allowing for customisation without compromising consistency.

This paper presents the rationale behind the Green School Certification, outlines the structure of the framework, and analyses the results from its first year of implementation. 14 GSG campuses were certified in 2024, demonstrating not only the viability of the model but also its potential to scale. In addition, the paper introduces the Green Office Certification (GOC), a new initiative currently under development to extend sustainability practices to GSG's corporate offices. Collectively, these efforts reflect GSG's approach to embedding sustainability across all levels of the organisation. By prioritising internal frameworks tailored to institutional realities, GSG offers a replicable model for school groups seeking to align policy with practice in a coherent and impactful manner.

Global Sustainability Trends in Schools

In recent years, the global education sector has witnessed a growing emphasis on sustainability frameworks designed to transform schools into models of environmental responsibility (Mogren & Gericke, 2022). This shift has been reinforced by a broader movement to embed education for sustainable development into curricula, operations, and institutional cultures. Internationally recognised programmes such as Eco-Schools, Green Flag, and LEED for Schools have played a prominent role in this space. The Eco-Schools programme, launched by the Foundation for Environmental Education, offers a whole-school approach that encourages student-led environmental action and is supported by a structured seven-step methodology (Foundation for Environmental Education, n.d.). The Green Flag certification, awarded through Eco-Schools, is a well-established symbol of a school's commitment to sustainable practices. Similarly, the LEED for Schools certification, developed by the U.S. Green Building Council, focuses on promoting environmentally responsible school infrastructure and operational efficiency (U.S. Green Building Council, 2013). These models have contributed to raising awareness and establishing standards across thousands of institutions globally.

Despite their influence, these external frameworks are not without limitations, particularly when applied across large and diverse educational networks (Nousheen et al., 2020). Many are designed with national or regional contexts in mind and may not adapt easily to the regulatory, cultural, or institutional diversity found within global school groups. Additionally, most of these models were originally designed for standalone schools rather than multi-campus systems. This creates challenges in ensuring consistent application, especially when trying to align external criteria with internal quality assurance structures. As a result, while these frameworks serve as strong reference points, they often require significant customisation to fit institutional realities. Furthermore, their implementation tends to be project-based or compliance-oriented, with less emphasis on long-term cultural integration or staff ownership.

Several scholars have noted the importance of contextualisation when applying sustainability education frameworks. Sterling (2012) argues that effective sustainability integration must go beyond checklists and ratings to influence the underlying pedagogical and organisational culture of schools. Similarly, Tilbury and Wortman (2004) highlight the need for flexibility and alignment with local governance structures when implementing education for

sustainable development at scale. These insights are particularly relevant to school groups like GSG, which operate across multiple jurisdictions and seek to maintain coherence in their sustainability efforts without imposing a one-size-fits-all approach.

The development of the GSG Green School Certification can be seen as a response to these limitations. Rather than abandoning external standards, the GSC draws upon the strengths of existing models while addressing their practical gaps. It was designed to be flexible enough to accommodate geographic and cultural variation, yet structured enough to promote accountability, comparability, and continuous improvement. It integrates sustainability directly into GSG's internal evaluation systems, which are already embedded in campus operations. This alignment ensures that sustainability is not treated as an add-on, but as part of a broader institutional framework. In doing so, the GSC responds to a recognised need within the field: to bridge the gap between policy intent and day-to-day practice in a manner that is credible, scalable, and internally driven.

Designing the Green School Certification Framework

The Green School Certification (GSC) was developed as an internal sustainability assessment framework by the Global Schools Group (GSG), intended to establish consistency in sustainable practices across its international campuses (GSG, 2024). The development process was overseen by the Global Centre for Education Excellence (GCEE), the quality and innovation arm of GSG. Recognising the need for alignment with global sustainability standards, GCEE incorporated guidelines from internationally recognised frameworks, including the Global Reporting Initiative (GRI), the Sustainable Development Goals (SDGs), and Environmental, Social, and Governance (ESG) criteria (United Nations, 2015; GRI, 2021). This integration of external benchmarks helped anchor the GSC within established sustainability discourse, while still allowing sufficient flexibility for adaptation to GSG's specific operational structures, educational methodologies, and local regulatory environments. Ultimately, the aim was not to replace external standards but to develop a complementary framework tailored explicitly to GSG's institutional priorities and geographic diversity.

The initial phase of designing the GSC involved extensive consultations with internal stakeholders, including school principals, campus operations teams and sustainability coordinators. Through structured workshops and meetings, the GCEE identified existing sustainability practices across campuses and determined areas requiring greater cohesion and standardisation. These sessions highlighted disparities in the way sustainability was documented, managed, and embedded across different campuses, with some schools demonstrating advanced sustainability integration while others were still in formative stages. Based on this analysis, the framework was crafted to accommodate varying levels of sustainability readiness, enabling each campus to identify strengths and focus areas for improvement. Stakeholder input emphasised the need for a framework that encouraged continuous progress and recognised incremental achievements without compromising comparability and rigour.

Literature on sustainability in education strongly influenced the methodological direction of the GSC. Sterling (2012) underscores that successful sustainability initiatives in education must engage deeply with organisational culture rather than merely adhering to technical compliance. Similarly, Henderson and Tilbury (2004) emphasise that sustainability

education must permeate all aspects of an institution, including governance structures, teaching practices, and daily operations, to drive meaningful, long-term change. Guided by these perspectives, GCEE structured the GSC around five comprehensive pillars: Eco Heartware, Environmental Management, Sustainability Learning, Community Connect, and Green Infrastructure. Each pillar corresponds to a critical area of institutional sustainability, reflecting both operational excellence and cultural integration. The weighting of these pillars was determined according to their institutional significance, with Eco Heartware and Environmental Management receiving greater emphasis due to their foundational impact on school culture and daily practices.

To validate the robustness and usability of the certification framework, GCEE conducted a pilot implementation across selected campuses representing diverse operational contexts and geographic locations. This pilot phase allowed for practical evaluation of the criteria and scoring system and provided valuable insights into the clarity and feasibility of the framework. Assessors conducted virtual walkthroughs, examined evidence submissions, and held feedback sessions with campus teams to refine assessment components. Initial feedback highlighted specific areas for improvement, such as enhancing clarity in rubric descriptions, adjusting criteria that overlapped, and ensuring ease of use for campus self-assessment. Following this feedback, the GCEE refined the scoring mechanism, clarified rubric descriptors, and adjusted the assessment guidelines to ensure transparency and consistency. These revisions significantly improved the practicality of the framework, enabling campuses to clearly understand expectations and systematically plan improvements.

The final GSC framework utilises a detailed, 100-point scoring system, with each of the five pillars broken down into clearly defined assessment sub-criteria. Each sub-criterion is evaluated on a four-level banding system, ranging from no evidence of action to exemplary performance. To encourage continuous improvement, GCEE established four certification tiers: Eco Initiator, Eco Achiever, Eco Leader, and Eco Champion. This tiered model is designed to acknowledge the incremental steps campuses take toward achieving sustainability excellence, rather than only celebrating the highest-level performers. Each certification is valid for two years, after which campuses must undergo reassessment to ensure sustained improvement and accountability. Furthermore, the assessment process itself mirrors established institutional auditing practices, involving pre-application preparation, formal evidence submission, assessor review, and comprehensive reporting. An appeals process was also incorporated, enhancing the framework's credibility and fairness. This structured and integrated approach ensures sustainability becomes an intrinsic element of GSG's institutional processes, reinforcing organisational commitment and cultural transformation across campuses.

The GSC Framework Explained

The Green School Certification (GSC) framework comprises five comprehensive pillars, each addressing a specific dimension of institutional sustainability. These pillars include Eco Heartware, Environmental Management, Sustainability Learning, Community Connect, and Green Infrastructure. Collectively, these pillars reflect a multidimensional approach to sustainability, encompassing organisational culture, operational practices, educational integration, community engagement, and physical infrastructure. This holistic approach aligns with academic literature, which suggests effective sustainability frameworks must integrate

institutional processes, educational practices, and organisational culture to achieve meaningful and enduring outcomes (Sterling, 2012; Henderson & Tilbury, 2004).

Eco Heartware, the first pillar, evaluates the extent to which sustainability is embedded into the culture and everyday practices of a campus. It measures the commitment and involvement of leadership, staff, and students in sustainability initiatives and assesses whether these efforts form part of the institution's core values rather than remaining peripheral activities. Under this criterion, campuses provide evidence through documented sustainability policies, leadership statements, student-led sustainability activities, and school-wide campaigns. Literature on organisational sustainability consistently underscores the crucial role of leadership and institutional culture in successfully embedding sustainability initiatives (Lozano, 2015). As such, this pillar carries significant weight within the certification framework, reinforcing the importance of leadership support and cultural integration in driving sustainable practices.

The second pillar, Environmental Management, focuses on evaluating a campus's resource management and its environmental impacts. Specifically, this pillar assesses a school's effectiveness in tracking and reducing energy consumption, water usage, waste generation, and carbon emissions. Participating campuses must systematically collect data on resource consumption and environmental impact, and they are expected to use this data to inform decision-making processes and sustainability strategies. These assessment practices align closely with international sustainability reporting guidelines, such as the Global Reporting Initiative, which emphasise data-driven accountability and continuous improvement in environmental management (GRI, 2021). By embedding these internationally recognised management principles, the GSC framework facilitates clearer target-setting and more effective performance tracking.

The third pillar, Sustainability Learning, examines how sustainability concepts are integrated into the curriculum and broader educational experiences provided by the school. Under this criterion, campuses are required to demonstrate that sustainability themes are embedded across multiple subjects and integrated within experiential learning programmes, rather than treated as separate topics within isolated lessons. Evidence of successful implementation includes sustainability-focused curriculum modules, classroom-based projects, and co-curricular activities. The importance of embedding sustainability education across the curriculum is widely supported in scholarly literature, which suggests that integrative approaches effectively foster long-term behavioural change and deepen students' understanding of sustainability (Tilbury, 2004; UNESCO, 2017). Thus, Sustainability Learning ensures students develop practical knowledge and skills to contribute to sustainability goals actively.

Community Connect, the fourth pillar, evaluates the school's level of engagement with external stakeholders, including local communities, governmental agencies, and environmental organisations. Campuses are assessed on their ability to extend sustainability initiatives beyond their institutional boundaries through meaningful community partnerships, outreach programmes, and collaborative projects. To satisfy this criterion, campuses must provide documented evidence of active engagement and the measurable impacts of their community-based sustainability activities. Academic research supports the notion that effective sustainability education requires robust community engagement, advocating that schools act as centres of community-wide sustainability leadership and action (UNESCO, 2017). Thus, the

Community Connect pillar reinforces the broader societal role of educational institutions as catalysts for sustainable change.

The fifth pillar, Green Infrastructure, evaluates the environmental sustainability of the campus's physical assets and facilities. This includes infrastructure elements such as buildings, landscaping, renewable energy installations, and overall resource-efficiency measures. Under this pillar, campuses are assessed on their commitment to sustainable design principles, such as energy-efficient buildings, use of renewable energy sources, water conservation systems, and biodiversity enhancement efforts. Research on sustainable infrastructure consistently indicates that green building practices significantly contribute to operational efficiency, reduce long-term resource consumption, and visibly demonstrate an institution's commitment to environmental stewardship (U.S. Green Building Council, 2013). Thus, the Green Infrastructure criterion reinforces the importance of tangible, measurable infrastructure improvements as part of a comprehensive sustainability strategy.

The GSC framework employs a structured 100-point scoring system to evaluate performance across these five pillars. Each pillar has clearly defined assessment criteria that are evaluated on a four-level scoring scale, ranging from minimal evidence to exceptional performance. To incentivise campuses toward ongoing improvement, GSG introduced a tiered certification system with four distinct levels of recognition: Eco Initiator, Eco Achiever, Eco Leader, and Eco Champion. This structured approach recognises incremental progress, allows schools at various stages of sustainability maturity to participate effectively, and encourages continuous development. Each campus's certification remains valid for a two-year period, after which reassessment is required to maintain accountability and ensure sustained improvement. The comprehensive assessment cycle involves clearly defined steps, including initial preparation, evidence submission, detailed assessor evaluation, formal reporting, and provision for appeals. By embedding the GSC process within the organisation's regular evaluation and reporting structures, GSG effectively institutionalises sustainability practices, ensuring they are maintained as integral components of campus operations and strategic planning.

Conceptual Insights and Reflections from Early Implementation

A significant aspect of evaluating the effectiveness of the Green School Certification (GSC) lies in the qualitative insights and experiences shared by participating campuses. Beyond numerical scores and certification tiers, it is essential to understand how the certification has influenced attitudes, behaviours, and institutional culture related to sustainability. Feedback from campus leaders, educators, and operational staff provides a nuanced picture of the certification's real-world impact, capturing dimensions not fully reflected in quantitative measures alone. These reflections offer important contextual insights into the certification's implementation, perceived value, and potential areas for refinement in future cycles.

Strategic Reflections from Leadership

At the leadership level, the GSC framework has been recognised as a strategic tool that not only drives operational alignment but also strengthens GSG's long-term sustainability vision. Our senior leadership has underscored the importance of embedding sustainability into the very

fabric of institutional culture, seeing GSC as a catalyst for both innovation and accountability across campuses.

Rajeev Katyal, Chief Executive Officer of Global Schools Group, emphasised the dual impact of the Green School Certification framework on both institutional practices and student mindsets:

“Green School Certification (GSC) is an initiative towards building schools that contribute towards a more sustainable society. In the process, two objectives get fulfilled – not only do the schools become greener and less resource consuming, but the students develop a commitment towards building a sustainable planet. GSC and Green Office Certification (GOC) initiatives then move the entire organisation towards substantial greening and sustainability. It helps build a less resource consuming organisation and reduces costs. It also creates innovative students who can create more out of less.”

This alignment between operational leadership and executive vision underscores the GSC’s role as a unifying platform for embedding sustainability into institutional culture and long-term planning.

Campus Leadership Perspectives

Campus leaders have generally expressed strong appreciation for the structured and transparent nature of the GSC framework, noting that clear criteria facilitated a more coordinated approach to sustainability planning and implementation. Leaders reported improved engagement from staff members due to the well-defined expectations and the supportive structure of the certification process. They also indicated that certification significantly elevated the visibility and institutional priority of sustainability efforts within their respective campuses.

Ms Madhu Khanna, former Principal of GIIS Tokyo (now Senior Principal, Glendale Academy, India), highlighted the collective significance of achieving Eco Achiever status for GIIS Tokyo:

“We are proud to be part of a programme that promotes meaningful sustainability initiatives. Achieving Eco Achiever certification is a testament to our community's dedication and teamwork, particularly the passionate efforts of our Sustainability Ambassadors. The executive report's insights will serve as a strategic roadmap, guiding us toward even greater sustainability excellence in the future.”

Ms Minu Salooja, Director of Glendale Academy, India, emphasised the achievement of securing the Eco Champion tier with a remarkable score of 93%, reflecting the school's deep commitment:

“This certification, attained at the highest level on our first attempt, underscores the tireless effort and dedication of our entire team. The comprehensive feedback provided by GSC will play a pivotal role in refining our sustainability

practices further, motivating us to continue raising the standards and impact of our eco-friendly initiatives."

Senior Principal Bijo Kurian from Witty International School described the GSC certification as both transformational and empowering for the school's community:

"The entire certification journey was deeply enriching and profoundly engaging. The GCEE team's supportive and structured approach provided our educators and students with clear direction and motivation, making sustainability a tangible, meaningful part of our everyday operations and culture."

Educators and Sustainability Coordinators' Reflections

Feedback from educators and sustainability coordinators frequently highlighted the impact of the GSC on curriculum planning and classroom integration. Many educators noted increased student engagement with sustainability issues, attributing this shift to the clear integration of sustainability themes within the curriculum and enhanced support from school leadership. Sustainability coordinators often cited improved data collection practices and resource management due to the certification's clear and measurable guidelines.

Ms Mahalakshmi, Sustainability Ambassador at One World International School (OWIS), Sarjapur, expressed her enthusiasm over achieving the Eco Champion designation:

"Being declared Eco Champion was immensely motivating and transformative. The process was a valuable opportunity for self-evaluation, inspiring us to deepen our sustainability practices and explore innovative ways to involve students more actively."

Ms. Tahira Taazneem Abdullah, Segment Coordinator at Regent International School, Sungai Petani, articulated the comprehensive nature of GSC and its far-reaching influence:

"Achieving the Eco Champion certification is a proud milestone for our school, made possible by the clear guidance and constructive feedback from the GSC evaluation team. This recognition propels our sustainability efforts forward, serving as a catalyst to embed sustainable thinking and practices into every aspect of school life. Through our ECOGENESIS initiative, we aim to inspire students as future-conscious global citizens, maintaining consistent excellence in our sustainability journey."

Ms Tahira further underscored the importance of continuous visibility of student-led sustainability projects through strategies such as Gemba Corners, enhancing community-wide engagement and awareness:

"The GSC framework has fundamentally reshaped our approach, making sustainability both visible and interactive. It has inspired our school community to engage continuously and meaningfully, ensuring sustainability remains a central pillar of our educational ethos."

Operational Challenges and Opportunities for Improvement

Despite broadly positive outcomes, campuses identified several operational challenges and opportunities for improvement during the initial implementation of the GSC framework. A primary operational challenge consistently reported was the difficulty in systematically gathering detailed data required by the certification criteria, notably concerning resource usage, waste management, and energy monitoring. Campuses indicated variability in their existing infrastructure, technical capabilities, and processes, which posed difficulties in accurately tracking, documenting, and evaluating these sustainability metrics. Enhanced technological solutions, clear data-reporting guidelines, and specialised training sessions for campus operational teams were identified as potential measures to address these challenges and ensure consistent data collection across diverse school environments.

Additionally, campuses highlighted a specific challenge related to younger student populations. Several GSG campuses cater predominantly to lower-grade students (early years and primary levels), and educators found certain GSC criteria challenging to implement effectively due to the developmental readiness and comprehension of younger students. As a result, the GCEE evaluation team adjusted the scoring criteria to ensure fairness and applicability, selectively omitting specific assessment components that were developmentally inappropriate or not realistically achievable for these younger cohorts. A potential long-term solution involves developing differentiated criteria sets tailored specifically to various student age groups, ensuring meaningful engagement without compromising overall rigour or consistency.

Furthermore, professional development emerged as a critical area for enhancement. Principals and sustainability coordinators emphasised the importance of providing targeted training workshops and capacity-building sessions. Such professional development opportunities would help campus teams effectively interpret and apply sustainability concepts within their school contexts, navigate assessment processes efficiently, and integrate sustainability more seamlessly into curricula and school culture. Addressing this need would not only improve operational effectiveness but would also enhance long-term sustainability literacy among educators and staff, ultimately fostering deeper institutional integration and ownership of sustainability initiatives.

Overall Qualitative Impact

The qualitative feedback gathered across GSG campuses underscores the GSC's significant contribution in creating a coherent, structured, and uniformly impactful sustainability approach. Campus leaders, educators, and sustainability coordinators consistently reported heightened sustainability awareness, improved operational practices, and increased student and staff engagement resulting directly from the certification process. This cultural and operational shift towards sustainability has established a stronger, more unified institutional identity around environmental responsibility, innovation, and stewardship.

As GSG continues to refine and expand the Green School Certification, systematically incorporating detailed campus-level feedback, including operational challenges, age-appropriate implementation adjustments, and professional development requirements—will be essential. Such ongoing refinements will ensure the GSC remains a responsive, practical, and

scalable model for sustainability in international education, setting benchmarks for best practices globally.

Institutional Impact and Future Directions

The introduction of the Green School Certification (GSC) has brought measurable institutional changes to Global Schools Group (GSG), with positive outcomes observed across multiple campuses in the network. One of the most notable impacts has been the increased alignment of sustainability practices across geographically and operationally diverse campuses. By establishing clear criteria and standards, the GSC has created a common language for sustainability that has fostered coherence and comparability throughout the organisation. This has facilitated greater consistency in operational practices, curricular integration, and community engagement, enabling campuses to move collectively toward sustainability goals. As research in organisational sustainability indicates, institutional alignment across diverse settings is essential for achieving consistent outcomes and maintaining long-term commitment to sustainability principles (Sterling, 2012; Lozano et al., 2015).

Another significant institutional impact is the noticeable shift in organisational culture, particularly around leadership ownership and staff engagement with sustainability issues. The certification process has reinforced the role of institutional leadership as critical enablers of sustainable practices, thereby influencing leadership priorities and decision-making processes. Feedback from early certification cycles suggests that the structured and transparent nature of the GSC framework has empowered campus leaders to embed sustainability more deeply within institutional governance structures and operational routines. This finding aligns closely with scholarly literature emphasising the critical role of leadership engagement and organisational culture in driving sustained behavioural change toward sustainability (Doppelt, 2017). Consequently, the certification has strengthened sustainability as a strategic priority rather than an ancillary activity.

A further dimension of institutional impact relates to pedagogical innovation and student involvement fostered by the GSC framework. The structured integration of sustainability into curricular and co-curricular activities has enhanced student participation and leadership in sustainability initiatives. This increased student engagement has been reflected in higher participation rates in sustainability-related activities, greater student-initiated projects, and increased advocacy within the broader community. Such outcomes align with the established understanding in education for sustainable development literature, which highlights the critical role students play in driving institutional and community sustainability transitions (UNESCO, 2017; Tilbury, 2004). The GSC framework, through its structured yet flexible criteria, has enabled campuses to leverage student enthusiasm effectively, significantly enriching the overall educational experience and reinforcing students' long-term commitment to sustainability.

Looking forward, GSG recognises several opportunities for future development and refinement of the GSC framework. Based on initial implementation insights and stakeholder feedback, there is potential to strengthen data management and monitoring systems to support campuses more effectively. Enhanced training and professional development opportunities for staff involved in sustainability management also represent an important priority. Continuous investment in staff capacity-building will ensure that campuses are better equipped to meet

certification standards and maintain sustainability practices over time. Additionally, campuses have highlighted the need for clearer guidance on effectively engaging local communities and external partners, suggesting that expanding support resources in this area could further enrich the Community Connect pillar.

Another strategic direction emerging from the initial success of the GSC framework is its expansion into the corporate and administrative arms of GSG through the proposed Green Office Certification (GOC). The GOC will adapt the GSC's structured and tiered model to the operational and cultural context of GSG's corporate offices. Although the fundamental principles will remain consistent; promoting operational excellence, leadership ownership, and cultural integration, certain adaptations will be necessary. These will include greater emphasis on operational efficiency, resource management, workplace culture, and leadership-driven sustainability initiatives rather than the curriculum and student engagement components central to the GSC. Such an expansion underscores GSG's commitment to embedding sustainability comprehensively throughout the organisation, further reinforcing its role as a sustainability leader within the education sector.

In conclusion, the GSC framework has not only standardised sustainability practices across GSG campuses but also significantly transformed organisational culture and operational behaviours. The certification has demonstrated the potential of internally developed frameworks to achieve institutional alignment, consistent performance standards, and sustained behavioural change across diverse educational contexts. As GSG continues refining and expanding the framework, the lessons learned from the initial implementation will guide future strategies and broader organisational transformations, ensuring sustainability remains a core strategic and cultural commitment across all levels of the institution.

From Green Schools to Certified Green Offices

Following the successful implementation of the Green School Certification (GSC) across campuses, and in response to growing interest from corporate offices within the Global Schools Foundation (GSF) network, the Global Centre for Education Excellence (GCEE) has expanded its sustainability agenda through the formal introduction of the Green Office Certification (GOC). This initiative extends the foundational principles of the GSC into administrative and corporate domains, enabling a more holistic institutional approach to sustainability. The GOC is designed to embed environmental consciousness and sustainable practices within the operations of GSG's corporate offices, while accounting for the distinct operational, cultural, and structural characteristics of non-academic environments. Through this expansion, GSG affirms its commitment to institutionalising sustainability not only within schools but also across all organisational functions.

As with the GSC, the GOC framework is anchored in a structured, tiered certification model supported by clearly defined performance indicators and assessment rubrics. By retaining these familiar elements, the GOC ensures internal coherence across the group's sustainability certification systems while adapting the framework to suit the needs of administrative offices. Unlike schools, which focus on curriculum integration, student leadership, and community outreach, the GOC emphasises workplace culture, operational efficiency, employee-driven green initiatives, and environmentally responsible office governance. Literature on institutional sustainability underlines the importance of contextual

adaptation to ensure relevance and uptake (Lozano, 2015; Henderson & Tilbury, 2004), and the GOC embodies this principle by translating proven methodologies from the education sector into the corporate setting.

Stakeholder engagement in the GOC reflects the realities of corporate environments, with a focus on staff involvement, leadership-driven policies, and interdepartmental collaboration. Initial consultations with GSF's corporate entities revealed strong enthusiasm from employees to participate in sustainability initiatives, provided that structured platforms and clear expectations were in place. As such, the GOC prioritises participatory mechanisms, such as staff-led green teams, office-wide campaigns, and incentives for sustainable behaviours. These are supported by policy alignment and leadership endorsement to create a culture of shared responsibility and collective impact. The role of leadership and employee empowerment is widely recognised as a success factor in workplace sustainability programmes (Doppelt, 2017), and is central to the design and execution of the GOC.

Operationally, the GOC introduces mandatory and optional criteria in areas such as energy consumption, paper and resource usage, waste management, digitalisation efforts, and sustainable procurement. Offices are required to conduct regular audits, set improvement targets, and document performance outcomes aligned with international frameworks such as the Global Reporting Initiative (GRI, 2021). By establishing structured expectations and measurable outcomes, the GOC fosters accountability and drives incremental change across the group's office-based functions. Sustainability audits and process reviews also allow for cross-comparison and benchmarking between offices, reinforcing a culture of continual improvement.

The first office to be certified under the Green Office Certification framework was the GIFTech office in India, GSF's technology arm. The office underwent a comprehensive internal assessment and demonstrated strong performance in operational efficiency, paperless digital processes, and staff-led green initiatives. Lessons learned from this pilot certification have informed the refinement of the GOC rubric, enabling smoother rollout for other offices in 2025 and beyond. The GIFTech example underscores the framework's adaptability and practical relevance, offering a blueprint for successful implementation across diverse office environments within the organisation.

In sum, the Green Office Certification represents GSG's strategic move to consolidate and scale its institutional sustainability commitments. It reinforces the idea that sustainability must extend beyond symbolic gestures or isolated projects to become embedded in everyday decision-making, operations, and workplace culture. The GOC is not merely a corporate sustainability checklist—it is a structured pathway to institutional coherence, cultural alignment, and long-term environmental stewardship. As both GSC and GOC frameworks mature, GSG is well-positioned to serve as a replicable model for other international education networks and institutions seeking to integrate sustainability across their educational and operational landscapes.

CONCLUSION

The implementation of the Green School Certification (GSC) represents a significant step forward for Global Schools Group (GSG) in institutionalising sustainability across its global network of campuses. The structured yet adaptable design of the GSC has effectively facilitated alignment, coherence, and continuous improvement in sustainability practices among diverse campuses. The framework's comprehensive approach, covering institutional culture, operational practices, educational integration, community engagement, and sustainable infrastructure, has proven effective in embedding sustainability into the daily operations and strategic planning of participating schools. Results from the first certification cycle indicate meaningful improvements across key sustainability indicators, including leadership engagement, staff ownership, student participation, and community outreach. Importantly, these outcomes have also underscored the critical role that structured certification frameworks play in fostering sustained institutional and behavioural change.

Building upon early successes and lessons learned, GSG is now poised to extend sustainability efforts beyond educational environments into corporate offices through the introduction of the Green Office Certification (GOC). This expansion signifies a deliberate strategic effort to embed sustainability comprehensively throughout the organisation, creating a cohesive institutional culture that prioritises environmental responsibility at every operational level. By tailoring sustainability frameworks specifically for corporate contexts, GSG demonstrates a nuanced understanding of how organisational culture, stakeholder engagement, and operational context influence sustainability integration. Such adaptability not only strengthens internal consistency but also positions GSG as a model institution in the broader educational sector, highlighting the potential of internally developed sustainability frameworks for meaningful institutional transformation.

Looking forward, continuous refinement of the GSC and effective implementation of the GOC will require ongoing stakeholder engagement, robust support systems, and clear mechanisms for accountability and continuous improvement. As GSG continues on this sustainability journey, institutional leaders, educators, students, and administrative staff will all have pivotal roles in maintaining and advancing the organisation's sustainability commitments. Ultimately, the GSC framework exemplifies how educational institutions can bridge the gap between sustainability policy and practical action, offering a replicable and scalable model for education systems worldwide. Through such comprehensive, integrated sustainability frameworks, institutions can meaningfully contribute to global sustainability goals while fostering organisational resilience, innovation, and excellence.

REFERENCES

- Doppelt, B. (2017). *Leading change toward sustainability: A change-management guide for business, government and civil society* (2nd ed.). Routledge.
- Foundation for Environmental Education. (n.d.). *Eco-Schools Programme*. Retrieved from <https://www.ecoschools.global>
- Global Reporting Initiative. (2021). *GRI Standards*. Retrieved from <https://www.globalreporting.org/standards>

- Henderson, K., & Tilbury, D. (2004). *Whole-school approaches to sustainability: An international review of sustainable school programs*. Australian Research Institute in Education for Sustainability (ARIES).
- Kopnina, H., & Meijers, F. (2022). Education for sustainable development (ESD): A critical review of concept and practice. *Environmental Education Research*, 28(10), 1391–1407.
- Lozano, R. (2015). A holistic perspective on corporate sustainability drivers. *Corporate Social Responsibility and Environmental Management*, 22(1), 32–44.
- Lozano, R., Ceulemans, K., & Scarff Seatter, C. (2015). Teaching organisational change management for sustainability: Designing and delivering a course at the University of Leeds to better prepare future sustainability change agents. *Journal of Cleaner Production*, 106, 205–215.
- Mogren, A., & Gericke, N. (2022). A systematic literature review on whole school approaches for sustainability. *Environmental Education Research*, 28(11), 1647–1667.
- Nousheen, A., Yousuf Zai, S. A., Waseem, M., & Khan, S. A. (2020). Education for sustainable development (ESD): Effects of sustainability education on pre-service teachers' attitudes and pedagogical skills. *Journal of Cleaner Production*, 250, 119537.
- Sterling, S. (2012). The future fit framework: An introductory guide to teaching and learning for sustainability in higher education. *Journal of Education for Sustainable Development*, 6(1), 137–139.
- Tilbury, D. (2004). Rising to the challenge: Education for sustainability in Australia. *Australian Journal of Environmental Education*, 20(2), 103–114.
- UNESCO. (2020). *Education for sustainable development: A roadmap*. United Nations Educational, Scientific and Cultural Organization. <https://unesdoc.unesco.org/ark:/48223/pf0000374802>
- UNESCO. (2017). *Education for Sustainable Development Goals: Learning Objectives*. Paris: UNESCO. Retrieved from <https://unesdoc.unesco.org>
- United Nations. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*. United Nations General Assembly. Retrieved from <https://sdgs.un.org/2030agenda>
- U.S. Green Building Council. (2013). *LEED reference guide for building design and construction: Schools*. U.S. Green Building Council. Retrieved from <https://www.usgbc.org/leed>