# Lowering the Entry Barrier: Developing FMG-Light Sourcing Pillar

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**Abstract Group Part**

Certification is widely used to support sustainability in hospitality but often assumes organisational autonomy, data maturity, and managerial capacity, limiting its applicability for small and medium-sized enterprises (SMEs). This study examines whether a simplified assessment framework can address this implementation gap. Using a qualitative case study of a Portuguese golf resort and interviews with industry experts, an adapted version of the Food Made Good Standard, FMG-Light, was developed and tested. Findings show that adoption barriers are primarily structural, linked to scale dependency, limited autonomy, and low data availability. The revised FMG-Light framework introduces a staged maturity model and zone-of-control logic, positioning sustainability assessment as a progressive development process for SMEs.

**Abstract Individual Part**

This individual study develops and evaluates a simplified sustainable sourcing framework within the FMG-Light model, focusing on the sourcing pillar of the Food Made Good Standard. Drawing on an extensive literature review on sustainable supply chain management, local and seasonal sourcing, plant-forward strategies, ethical procurement, and sustainable seafood, a set of low-effort, high-impact sourcing indicators was designed using a three-stage maturity model. These indicators were tested through ten semi-structured interviews with managers at a Portuguese golf resort and experts from the Sustainable Restaurant Association. Findings reveal that sustainable sourcing is primarily constrained by structural factors such as scale dependency, bounded autonomy, and low data maturity. In response, a revised FMG-Light Sourcing Pillar (V2) is proposed as a transitional capability framework towards full certification.

**Keywords:** Sustainable hospitality; certification; SMEs; paradox theory; maturity models; capability building.

**Table of Contents**

## List of Abbreviations

| | |
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| **ASC** | Aquaculture Stewardship Council |
| **CE** | Circular Economy |
| **EMAS** | Eco-Management and Audit Scheme |
| **ESG** | Environmental, Social and Governance |
| **ETIS** | European Tourism Indicator System |
| **FMG** | Food Made Good |
| **GHRM** | Green Human Resource Management |
| **GRI** | Global Reporting Initiative |
| **GSTC** | Global Sustainable Tourism Council |
| **HR** | Human Resources |
| **HVAC** | Heating, Ventilation and Air Conditioning |
| **IoT** | Internet of Things |
| **ISO** | International Organization for Standardization |
| **MSC** | Marine Stewardship Council |
| **PDCA** | Plan–Do–Check–Act |
| **SME** | Small and Medium-sized Enterprise |
| **SOP** | Standard Operating Procedures |
| **SRA** | Sustainable Restaurant Association |
| **SSCM** | Sustainable Supply Chain Management |

# 1 Introduction

The hospitality sector occupies a contradictory position: while it is celebrated as a driver of economic development (World Travel & Tourism Council., 2024), it simultaneously places disproportionate pressure on natural resources and ecosystems (Dibene-Arriola et al., 2021). As global tourism intensifies, sustainability certifications have become key mechanisms for governing organisational practices and demonstrating legitimacy to regulators and consumers (Legrand, et al., 2022). However, despite their growing relevance, research on certifications has paid insufficient attention to the structural conditions shaping accessibility. Existing debates largely assume organisational autonomy, stable data systems, and managerial capacity, assumptions that do not reflect the operational realities of small and medium-sized enterprises (SME) (Font et al., 2023).

This oversight creates a persistent implementation gap. While most certification systems rely on audit logic that presupposes sophisticated monitoring infrastructures (Khatter, 2023), SMEs typically operate with limited administrative resources, informal routines, and fragmented data architectures (Valente & Uršič, 2025). In Portugal, these systemic constraints are reinforced by governance configurations in which sustainability responsibilities are devolved to the unit level, while key procurement and governance decisions remain centralised (Santos, 2023). The result is not resistance to sustainability, but structural exclusion.

Hospitality SMEs are particularly vulnerable to these dynamics due to their labour-intensive nature, volatile supply chains, and limited capacity for capital investment, factors that compound the challenges of meeting high-barrier certification requirements. However, the existing literature has not adequately explored how certification frameworks could be redesigned to address these constraints

In response to this gap, the present work project develops and field-tests FMG-Light, a transitional sustainability framework adapted from the Food Made Good Standard (FMG) (The Sustainable Restaurant Association, n.d.). Using a qualitative case study of a mid-sized Portuguese resort, it examines how a staged maturity model can transform informal sustainability practices into verifiable ones, enabling SMEs to meaningfully progress towards certification readiness (Assoratgoon & Kantabutra, 2023).

# 2 Literature Review

## 2.1 Sustainability in the Hospitality Sector

The hospitality industry occupies a paradoxical position in the discourse on sustainability: it fosters socio-economic growth while concurrently contributing significantly to environmental degradation. Globally, it accounts for over 10% of Gross Domestic Product (GDP) and employs one in ten jobs (World Travel & Tourism Council 2024), yet consumes disproportionate amounts of energy and water while generating substantial waste (Dibene-Arriola et al., 2021; Gössling, 2014). This duality renders the sector pivotal to global sustainability debates, particularly those aligned with the Sustainable Development Goals and the Paris Climate Agreement (Legrand et al., 2023).

Sustainability conceptualization has transitioned from philanthropic Corporate Social Responsibility towards a more comprehensive Environmental, Social and Governance (ESG) framework (Fonseca & Carnicelli, 2021), signaling the strategic internalization of the triple bottom line line (Elkington, 1999; Ozanne et al., 2016), balancing environmental management, social responsibility and economic resilience (Bux & Amicarelli, 2023). From a systems perspective, hotels function as socio-ecological systems, with interconnectedness to their respective communities and ecosystems (Migale et al., 2019). Consequently, sustainability issues require systemic, cross-sectoral solutions (Đurić et al., 2025). Water scarcity in the Algarve, alongside seasonal employment insecurity, exemplifies these tensions (Kastenholz & Lopes De Almeida, 2008; Mira et al., 2025; Standen et al., 2023). Despite growing commitment, barriers persist, including limited data, high technology costs, staff turnover, and low environmental awareness (Singh et al., 2024). SMEs, which are the dominant force in the Portuguese hospitality sector, face resource constraints that hinder ESG adoption (Valente & Uršič, 2025). The pandemic intensified these challenges. In 2020, international arrivals fell by 74%, reducing the sector's GDP share to 5.5% and eliminating 62 million jobs (UNWTO, 2021). Many firms paused sustainability initiatives, though the crisis also spurred discussion of resilience, responsible growth, and consumer demand for transparency (Higgins-Desbiolles, 2020). Furthermore, it has been demonstrated to accelerate digitalisation, localisation, and consumer demand for transparency (Gössling et al., 2021).

Portugal serves as a prime example of these dynamics. Before the pandemic, tourism represented about 15% of GDP and 10% of employment (De Fátima Brilhante & Rocha, 2023). Tourism receipts reached 10.24% of GDP in 2019, followed by a 50% contraction in 2020. By 2023, demand exceeded 2019 levels by 10% and RevPAR by 31% (Almeida & Silva, 2020). However, the adoption of sustainability practices remains inconsistent. Large hotel groups such as Pestana have reactivated ESG programmes (Pestana Hotel Group, 2022), while SMEs continue to struggle (Valente & Uršič, 2025). The national plan Turismo Mais Sustentável 2020-23 promotes decarbonization, biodiversity protection, and inclusion, yet regional disparities persist, with Lisbon and the Algarve outperforming rural areas (OECD, 2025).

Sustainability offers a competitive advantage through reduced operating costs, enhanced reputation, improved employee engagement, and resilience (Legrand et al., 2023; Sakshi et al., 2020). The Portuguese case underscores the global paradox of balancing recovery, equity, and environmental protection (Legrand et al., 2023). In alignment with this awareness, the

Portuguese tourism policy now prioritises qualitative over quantitative growth. Current policy prioritizes “value over volume”, seeking higher-spending visitors to enhance competitiveness while promoting stewardship and inclusion. This reflects a shift toward systemic transformation of the hospitality model.

### 2.2 Theoretical Foundations

Recent research in hospitality and tourism increasingly draws on paradox theory, staged change models, and signalling theory to explain why organisations adopt sustainability strategies and certifications and implement change initiatives. Together, these approaches shed light on the structural, behavioural, and communicative dynamics that underpin sustainability transitions in service industries.

Paradox theory offers a framework for understanding the inherent tensions that organisations face when balancing economic performance with social and environmental objectives. Rather than viewing profit and sustainability as incompatible, paradox scholars argue that these tensions are permanent and cannot be definitively resolved (Smith & Lewis, 2011). In the hospitality industry, these tensions manifest as dilemmas such as balancing cost efficiency with long-term environmental stewardship, or meeting guest expectations while reducing resource intensity. A paradoxical perspective emphasises “both/and” approaches, requiring organisations to engage with competing demands simultaneously to create value (Carmine & De Marchi, 2023). Similarly, Edwards (2021) argues that viewing organisational growth as developmental helps firms identify opportunities that advance financial returns and sustainability. This aligns with research on multidexterity, which highlights the capabilities needed to pursue economic and non-economic goals concurrently. Engaging with paradoxes can catalyse innovation, as organisations with a “paradox mindset” tend to experiment with integrative solutions, such as eco-efficiency or green product innovation (Matos et al., 2020).

Hospitality firms that acknowledge these tensions are therefore more likely to develop adaptive strategies and resilient business models. Paradox theory thus helps to explain why organisations adopt sustainability certifications as “"boundary objects” hat formalise competing priorities and provide governance structures for navigating them tensions (Hahn et al., 2018; Mosgaard & Kristensen, 2023).

Staged change models conceptualise the adoption of sustainability as an evolutionary process involving readiness, capability building and cultural transformation. Classic frameworks, such as Kotter's (1996) eight-step model, emphasise the cumulative impact of leadership, social norms, and organisational learning. In sustainability research, maturity models build on this idea by mapping the journey from ad hoc initiatives to fully embedded sustainability cultures (Edwards, 2021). Empirical studies of the hospitality industry show that firms typically begin with low-effort interventions (e.g. reducing energy or water use) before progressing towards deeper commitments involving changes to procurement, the supply chain and organisational culture (Assoratgoon & Kantabutra, 2023). Underlying values and identity structures shape this trajectory. Once sustainability becomes a shared organisational principle, certification is viewed less as an external demand and more as a natural extension of internal commitments (Ketprapakorn & Kantabutra, 2022). Staged change models, therefore, illuminate how certification unfolds through accumulated learning and alignment rather than sudden shifts.

Signalling theory explains how firms communicate unobservable qualities in contexts of uncertainty and information asymmetry (Spence, 1973). In the hospitality industry, where services are intangible and supply chains are unclear, third-party certifications act as signals of legitimacy. Their value depends on the strength of governance, the rigour of verification and stakeholder trust (Bernard & Nicolau, 2022). Strong certifications can differentiate firms and provide reputational benefits; however, misalignment between claims and practices can lead to scepticism from stakeholders or accusations of greenwashing (Matos et al., 2020). Therefore, certifications are not only operational tools, but also communicative devices embedded in reputational dynamics and stakeholder expectations.

Despite their relevance, these theories often remain fragmented within the field of hospitality sustainability research. Scholars such as Farsari (2023) and Hall (2022) have criticised this conceptual dispersion, calling for integrated theoretical foundations. Similarly, Edwards (2021) stresses the need to bridge the gap between conceptual reasoning and lived organisational realities. Together, Paradox Theory, Staged Change Models, and Signalling Theory provide a coherent framework for analysing sustainability certification. Paradox Theory explains why firms adopt certification to manage competing priorities, Staged Change Models explain how this adoption process unfolds through capability development, and Signalling Theory explains the message that certification communicates to the market. This integrative framework is illustrated in Figure 1 below.

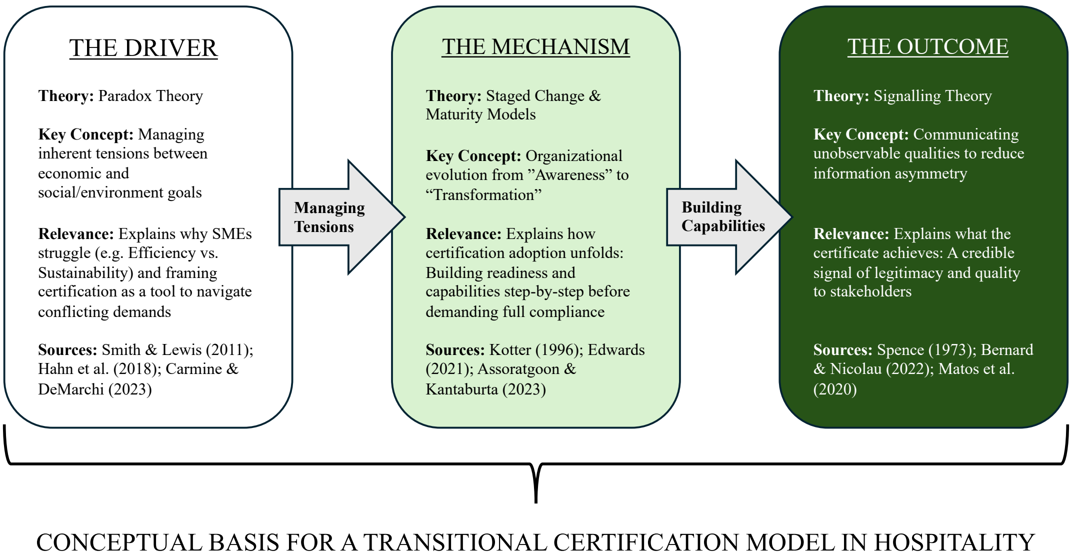


Figure 1: Integrative Theoretical Framework for Analyzing Sustainability Certification

*Source: Author's own elaboration, synthesizing Paradox Theory (Hahn et al., 2018), Staged Change Models (Edwards, 2021), and Signalling Theory (Spence, 1973)*

Collectively, these frameworks position sustainability certification, such as FMG-Light, not merely as technical compliance, but as a strategic, developmental, and communicative act.

### 2.3 Sustainability Certifications in Hospitality

Sustainability certifications represent foundational instruments through which environmental and social goals are operationalised in the global hospitality industry. Their origins can be traced back to the late 20th century, coinciding with rising awareness of tourism's ecological footprint and the need for institutionalised forms of environmental governance (EarthCheck, 2025). These instruments are not merely promotional, as they establish comprehensive standards that regulate how hotels, restaurants, and associated hospitality enterprises demonstrate environmental accountability. Moreover, these tools facilitate the establishment of systematic pathways towards environmental stewardship. The increasing number of sustainability certifications indicates that ESG reporting has become a fundamental component of organisational regulatory compliance, risk management frameworks, performance-tracking systems, and stakeholder transparency imperatives (Krantz & Jonker, 2024). Certifications demonstrate an organisation's commitment to urgent environmental objectives, positioning it strategically relative to its competitors.

Significant environmental consequences characterise the hospitality industry. The subsector of subsectors, including lodging facilities, has caused the most pronounced environmental impact, in terms of water consumption and other critical sustainability parameters (Sharma, 2023). Empirical research indicates that five-star hotels consume, on average, between 170 and 4,401 litres of water per guest per night, with significant financial implications for consumption-reduction measures, thereby creating strong economic incentives for properties to adopt standardised sustainability initiatives that simultaneously lower operational costs and enhance environmental accountability. (Futagami & Thusitha, 2022; Sharma, 2023). Representative performance-based certifications include EarthCheck and GreenKey (EarthCheck, 2025; Green Key, 2025).

Certification systems in hospitality are broadly categorised into process-based and performance-based models, each reflecting analytically distinct approaches. Process-based certifications, such as International Organization for Standardization (ISO) 14001 and Green Globe, establish systematic frameworks that facilitate the documentation and tracking of sustainability endeavours, rather than imposing compliance with predetermined quantitative criteria (Futagami & Thusitha, 2022; Masviba, 2022).

In contrast, performance-based systems establish explicit criteria, benchmarks, and measurable objectives that enterprises must meet to obtain certification (Futagami & Thusitha, 2022). Certifications such as EarthCheck and Green Key have been shown to incentivise management to engage and promote continual improvement and competitive differentiation (EarthCheck, 2025; Futagami & Thusitha, 2022; Green Key, 2025). The choice between these systems reflects an organisation's fundamental orientation toward sustainability, whether it values procedural compliance or measurable outcomes. In practice, many hospitality businesses adopt hybrid models or combine multiple certifications to fulfil both internal governance needs and external reputational obligations (Hernandez-Vivanco et al., 2019).

The legitimacy and global coherence of sustainability certifications are maintained through meta-regulatory institutions such as the Global Sustainable Tourism Council (GSTC) (GSTC, n.d.). Large hotel groups often align their sustainability agendas with these globally GSTC-recognised or GSTC-accredited frameworks to enhance legitimacy and standardise practices across geographically diverse portfolios. For example, Iberostar's partnership with EarthCheck, under its "Wave of Change" initiative, illustrates how certification can be embedded into corporate sustainability strategies that aim not only for compliance but for regenerative tourism outcomes (Iberostar Group, 2025). This strategic positioning illustrates the extent to which multinational enterprises seek to advance beyond plastic reduction initiatives toward comprehensive positive tourism transformation models. Here, the certification functions as both an internal governance instrument and an external signalling mechanism, reinforcing stakeholder trust whilst generating positive environmental and social outcomes (EarthCheck, 2019; Iberostar Group, 2025). Besides this, other major multinational hotel corporations have strategically included certification frameworks through calculated organisational positioning. Meliá Hotels International exemplifies this strategic approach, implementing EarthCheck certification across extensive property portfolios, thereby establishing itself as a sustainability-oriented market participant (EarthCheck, n.d.).

In addition to formal certification frameworks, ecolabels and sustainability awards serve as complementary mechanisms that institutionalise recognition of hospitality sustainability practices. According to the Global Ecolabelling Network, ecolabelling is defined as a voluntary process that assesses the cumulative environmental impacts throughout the entire product and service lifecycle (Global Ecolabelling Network, 2025). However, the scientific community has raised concerns about the credibility and verification of such labels, particularly in light of increasing consumer scepticism toward greenwashing (Gay et al., 2024). The EU's "Green Claims Directive" directly responds to these issues by mandating robust third-party verification of environmental claims (European Commission, 2025).

Besides this, the landscape of international tourism awards comprises prestigious global initiatives, such as the World Sustainable Travel and Hospitality Awards or the Sustainable Luxury Hotel Awards, which aim to recognise leadership and innovation in sustainability (Sustainable Luxury Awards, 2025; World Sustainable Travel & Hospitality Awards, 2025). However, unless underpinned by transparent methodologies and objective criteria, they risk reinforcing performance-driven rather than transformative sustainability. Hence, scholars have called for a clearer separation between recognition-based instruments and compliance-based certifications, urging closer integration with scientific indicators and evidence-based evaluation (Gonçalves et al., 2021; Lindfors, 2021).

In the European context, sustainability certification is deeply intertwined with supranational policy frameworks, notably the European Green Deal, which positions the tourism sector as a key actor in achieving climate neutrality by 2050 (European Commission, n.d.). Instruments such as the EU Ecolabel and the Eco-Management and Audit Scheme (EMAS) are not merely optional certifications, they are embedded within broader regulatory architectures that influence funding eligibility, procurement standards, and reporting requirements. While these frameworks offer structured support for sustainable transformation, empirical studies reveal significant asymmetries in adoption. As of 2024, only 9.3% of European hotels within an 82,301-property sample were certified under a sustainability standard, with certifications concentrated among large chains and upscale properties (Font et al., 2025). It is evident that SME or independent hotels establishments encounter significant challenges in achieving compliance with hinders being emergent regulatory frameworks, particularly the Green Transition Directive and the Green Claims Directive (European Commission, 2025; European Union, 2024). Structural barriers, such as high initial costs, limited technical expertise, and complex application procedures, continue to impede the adoption of the Green Claims Directive, which may assume binding regulatory status in 2027, requiring significant organisational adaptation to the new regulatory environment. (Wiedemann, 2025). In response, researchers have called for differentiated support mechanisms and capacity-building initiatives, tailored to the needs of smaller operators (Indiran et al., 2025; Mitchell et al., 2020).

Portugal presents an illustrative case of partial success in embedding sustainability certification into the hospitality sector. Recent data show that 52% of Portuguese hotels have adopted at least one form of certification, substantially higher than the European average (Mabrian, 2024). However, a closer examination reveals that only around 3% of these hotels are certified by independent sustainability auditors, and the majority are predominantly awarded through online travel agent mechanisms, highlighting a discrepancy between symbolic adoption and substantive verification. With over 270 hotel establishments and 373 additional tourism organisations that are registered under the Eco-Management and Audit Scheme framework, Portugal's engagement is supported by a robust institutional infrastructure (European Commission, 2022). Public institutions operate within the Environment and Climate Action Ministry and contribute to monitoring, aligning policies, and disseminating best practices (Agência Portuguesa do Ambiente, 2025). This reflects a state-facilitated governance model, wherein public institutions enable private actors to engage in voluntary yet strategically important certification schemes. Leading Portuguese hotel groups have leveraged certification to integrate sustainability into core operations. The Pestana Group, for instance, has implemented Green Key certification across multiple properties, introducing measures such as energy-efficient infrastructure, wastewater recycling, and renewable energy generation (Pestana Hotel Group, 2023). Research examining sustainability patterns amongst Portuguese hotels indicate that chain-affiliated and large hotels are up to three times more likely to be certified than smaller, independent operators, reinforcing the argument that organisational capacity, scale, and financial possibilities remain critical variables in certification acquisition (Kastenholz & Lopes De Almeida, 2008; Legrand et al., 2022; Mira et al., 2025).

The growing adoption of sustainability certifications in hospitality reflects an important shift toward institutionalised environmental governance. However, the literature points to persistent challenges, namely conceptual confusion between certification, labelling, and awards, uneven distribution of implementation across hotel types and locations and limited empirical assessment of certification outcomes. It is evident that sustainability certifications have become a pivotal mechanism through which hospitality enterprises can effectively address the increasing pressures of environmental stewardship, regulatory compliance, and the need for competitive differentiation.

## 2.4 Synthesis and Research Gap

As the preceding sections have highlighted, sustainability in the hospitality industry is increasingly being recognised as a strategic imperative rather than a peripheral add-on. However, its implementation remains uneven and structurally skewed. At a sector level, sustainability is conceptualised as a systemic challenge, with the environmental, social, and economic dimensions being tightly interlinked, particularly in destinations that depend on tourism, such as Portugal. There, water scarcity, seasonal employment, and dependence on international markets jointly produce a "sustainability paradox" (Kastenholz & Lopes De Almeida, 2008; Legrand, et al., 2022; Mira et al., 2025). At an organisational level, Paradox Theory, staged change models, and Signalling Theory suggest that sustainability is a strategic tension site, a gradual maturation process, and a communicative act that shapes stakeholder perceptions (Edwards, 2021; Hahn et al., 2018; Ketprapakorn & Kantabutra, 2022; Matos et al., 2020).

Further literature on certification frameworks indicates that third-party schemes can be powerful agents of change. Process- and performance-based certifications institutionalise environmental and social practices, provide management with decision-making guidelines and offer regulators, investors and guests credible evidence of responsibility (EarthCheck, n.d.; Futagami & Thusitha, 2022; Green Key, 2025; Krantz & Jonker, 2024). Nevertheless, empirical studies show that uptake of certification is concentrated among large, chain-affiliated and upscale hotels. These hotels possess the financial, technical and organisational capacities required to navigate complex standards and evolving European policy architectures (Font et al., 2023; Martins et al., 2024). Small and medium-sized enterprises dominate the Portuguese accommodation sector. However, they face resource constraints, knowledge gaps and bureaucratic burdens that limit their participation in existing schemes (Valente & Uršič, 2025).

Taken together, these areas of research suggest that certifications can stimulate organisational learning, demonstrate legitimacy, and reconcile tensions between profit and purpose. However, they tend to engage with firms that are already relatively advanced in their sustainability journey. Current models largely overlook early-stage adopters, particularly independent and SME hotels with emerging awareness but limited readiness. Existing standards tend to be comprehensive and technically demanding. This means they offer limited guidance for hotels that are seeking a pragmatic entry point with a focus on achievable, high-impact practices. Furthermore, there is little conceptual or empirical work in the literature on simplified, time-bound certifications that are explicitly designed to develop foundational capabilities and prepare hotels for more demanding schemes.

This situation highlights a clear gap in research and design. There is currently no streamlined, hotel-specific model that is explicitly aligned with the FMG Standard and tailored to the constraints of SME hospitality operators. In particular, there is an absence of a simplified, time-bound toolkit that translates FMG's pillars of sourcing, society, and the environment into an operational framework for hotels. This framework should emphasise low-effort/high-impact interventions, developmental learning, and credible but proportionate signalling.

This work project aims to address this gap by conceptualising and piloting an FMG-Light model as a transitional certification instrument. FMG-Light is intended to help hotels navigate paradoxical sustainability tensions at an early stage, move through identifiable change phases, and demonstrate commitment without the complexity of established schemes. This work, therefore, seeks to contribute both theoretically, by integrating the perspectives of paradox, staged change and signalling into the design of entry-level certification, and practically, by proposing a context-sensitive tool to support SME hotels in progressing towards more comprehensive sustainability standards.

# 3 Methodology

## 3.1 Research Design, Process, and Setting

This exploratory, qualitative research project aimed to develop and refine the FMG-Light sustainability assessment toolkit for small and medium-sized hospitality businesses. Rather than evaluating the sustainability performance of the partner hotel, the purpose was to understand how sustainability practices were enacted in daily operations and to identify which indicators were feasible, measurable, and practically meaningful. As sustainability was contextually shaped by organisational routines, resource constraints, and staff interpretations, an exploratory qualitative approach seemed appropriate for capturing these situated dynamics. The research followed a two-phase process. First, a systematic literature review was conducted, using the FMG pillars of Sourcing, Society, and Environment as thematic anchors. Academic and industry literature was analysed to identify low-effort, high-impact practices relevant to SME hotels. This analysis informed the development of FMG-Light Version 1 (V1), comprising ten sub-elements with guiding questions. The emphasis on usability reflected insights from indicator research showing that complex frameworks often fail when organisations lack the absorptive capacity to operationalise them (Font et al., 2023). Secondly, FMG-Light V1 was empirically assessed through fieldwork at a Discovery Hotel Management (DHM) hotel. This site was selected because it reflected typical SME characteristics and was willing to engage in the development of an early-stage sustainability tool. An expert interview with a Sustainable Restaurant Association (SRA) representative provided additional insight into simplified certification systems. It is important to note that the focus of this phase was on assessing the feasibility and clarity of the indicators rather than measuring sustainability performance. Therefore, the claims of empirical assessment refer to users' interpretations, operational alignment, and practical applicability, rather than to quantitative validation of indicator outcomes.

### 3.2 Data Collection

Data were collected through semi-structured interviews and observations. Ten interviews were conducted with key hotel staff and an SRA expert. The interview guide covered three themes: (1) existing sustainability practices; (2) data availability and measurement challenges; and (3) the perceived usefulness and feasibility of the FMG-Light indicators. All interviews were recorded with consent and transcribed. Participant and non-participant observations were conducted across operational and guest-facing areas. Field notes documented sustainability behaviours, waste practices, staff routines, and the alignment between stated policies and observed practices. Photographs were taken where permitted to support contextual understanding.

### 3.3 Data Analysis and Toolkit Refinement

Qualitative data were analysed using thematic analysis (Braun & Clarke, 2022). Codes were generated both deductively, from the FMG-Light V1 framework, and inductively, from the interview and observational data. These codes were then clustered into themes relating to operational constraints, measurement gaps, and staff practices. These themes were then compared with the FMG-Light V1 to evaluate their relevance and feasibility. Following insights from research on indicator effectiveness, which highlights the importance of aligning frameworks with user capacity (Font et al., 2023), the indicators were refined for clarity, specificity, and practicality. This iterative process resulted in FMG-Light Version 2 (V2), an empirically assessed adaptation of the initial toolkit that reflects practitioner feedback and observed operational realities.

### 3.4 Trustworthiness and Ethics

Credibility was enhanced through the triangulation of interview and observational data, reflexive note-taking, and the informal validation of interpretations by DHM staff and the SRA expert. Transferability was supported by providing contextual details about the hotel as a representative SME. Ethical approval was granted under the Nova SBE Work Project framework, and informed consent was obtained from all participants. All data were anonymised to ensure confidentiality.

## 4 Case Context

DHM is a Portuguese hotel management group that was established in 2014. The company's primary objective is the rehabilitation and management of a diverse portfolio of hospitality and real estate assets . Rather than prioritising new construction, the organisation focuses on the redevelopment and responsible utilisation of existing properties. This strategic approach is aligned with contemporary sustainability-oriented development principles. Since its foundation, DHM has reopened 18 hotels, five golf courses, and several real estate projects across Portugal and the Azores (Discovery Hotel Management, 2025). Thus, it positions sustainability as an operational pillar of paramount importance that is non-negotiable. The ESG framework of DHM is founded upon a materiality assessment conducted in 2022, which identified key priority areas including energy management, carbon reduction, water efficiency, waste minimisation, biodiversity, responsible sourcing, labour practices, community well-being, and governance (Discovery Hotel Management, 2024). The DHM Sustainability Report 2024 demonstrates the organisation's achieved significant environmental progress since 2019 such as reduced water consumption per guest, digital check-ins/outs, the elimination of many single-use plastics, and partnerships with municipal waste systems (Discovery Hotel Management, 2024). In terms of social initiatives, the company has implemented the DHM24 employee well-being programme, allocated over 7,400 hours of annual training, and fostered workforce diversity, with representation from over 24 nationalities (ibid). In addition, the company has collaborated with organisations such as ARCIL to promote disability inclusion (ibid). The governance structures of these organisations adhere to a classical organisational model, characterised by board-level oversight and the implementation of internal conduct policies (ibid).

Dolce CampoReal Lisboa has been included in the DHM portfolio since 2022 and is part of the group's broader sustainability commitments. Dolce CampoReal Lisboa is a five-star golf and wellness resort situated in Torres Vedras, approximately 30 minutes from Lisbon International Airport (Booking.com, 2025). The resort offers 151 guest rooms and suites, three swimming pools, an 18-hole golf course, a tennis court, a 700 m² spa, a kids' club, a dedicated team-building space (Clube Aventura), a footgolf facility, four restaurants and bars, a fitness centre, and an extensive meetings infrastructure comprising 23 rooms on 2,150 m² of total event space (Dolce CampoReal Lisboa, 2025). The Dolce CampoReal Lisboa operates as Wyndham Hotels & Resorts'  most upscale brand, positioned within the world's largest hotel franchising company by property count, offering over 9,100 hotels across 95 countries and specialising in state-of-the-art meeting facilities and destination-driven experiences (LinkedIn, 2025; Wyndham Hotels & Resorts, 2025a, 2025b). The resort's location within the protected landscape of the Archeira and Socorro Mountains contributes to its environmental profile. The hotel has been recognised for its sustainability efforts with the Green Destination Award and the Green Key Award for four consecutive years (Dolce CampoReal Lisboa, n.d., see Appendix 14, Figures 14.1 – 14.3). The resort has also committed to the public disclosure of a sustainability policy on its website, however, it is exclusively in Portuguese (Discovery Hotel Management, 2022). A variety of environmental practices are in operation on the premises, including the elimination of plastic bottles, the utilisation of reusable glass bottle systems, water-filtration stations available to all guests, the use of rainwater for golf course irrigation, LED lighting, motion sensors, and internal waste-sorting systems. The Nourishment Hub™, a permanent coffee-break area, has been designed to minimise the use of disposable materials (ibid).

The selection of Dolce CampoReal Lisboa as a pilot site was made based on a combination of factors, including its upscale operations, the uneven nature of its sustainability practices, and its strategic relevance within the DHM portfolio. Preliminary analysis suggests that, although the resort complies with several environmental standards and holds recognised sustainability certifications, its sustainability communication, sustainable sourcing practices, and operational integration remain less developed than DHM's overall strategic ambitions. This relative gap makes the property a suitable environment for testing and refining sustainability assessment tools such as the FMG framework. Its status as a large, mixed-use golf and wellness resort provides an opportunity to examine sustainability challenges in complex hospitality settings.

# 5 Joint Framework & Integration

FMG-Light was developed through a structured review of the literature and sustainability frameworks associated with the three pillars of the full FMG Standard (Sourcing, Society, Environment), as shown in Figure 2. This review informed the identification of sustainability dimensions most relevant to hospitality operations. To ensure methodological robustness, these dimensions and the initial indicator set were systematically cross-referenced with four complementary frameworks: the Global Reporting Initiative (GRI), ISO 14001 Environmental Management Systems (EMS), the Eco-Management and Audit Scheme (EMAS), and the European Tourism Indicator System (ETIS). Priority was placed on high-impact, low-effort actions. This ensured that FMG-Light remained accessible to hospitality businesses experiencing resource constraints or low levels of engagement, while facilitating meaningful sustainability improvements (Longo & Cardillo, 2025).

The integration of GRI and ETIS served distinct purposes. GRI provides internationally standardised definitions, metrics, and disclosure structures covering procurement, resource consumption, emissions, waste, biodiversity, and social practices (GRI, n.d.). Alignment with GRI strengthens FMG-Light's credibility and comparability. ETIS, explicitly designed for tourism destinations, provides indicators on resource efficiency, destination governance, and local value creation (Raub & Martin-Rios, 2019), ensuring sectoral relevance and compatibility with European monitoring systems.

ISO 14001 (EMS) and EMAS are especially pertinent in the Portuguese hospitality context, where national strategies such as *Tourism Strategy 2027* and EU-level initiatives under the Green Deal emphasise sustainability, reporting, and life-cycle accountability. Many hotels, however, still rely on informal supplier relationships and limited monitoring infrastructures. EMS principles, therefore, formalise procurement and operational practices through documented criteria, measurable indicators, and feedback loops. At the same time, EMAS audit culture can strengthen relationships with local producers through transparent communication and shared improvement targets (Khatter, 2023). A core element of the FMG-Light design is its alignment with the Plan-Do-Check-Act (PDCA) logic embedded in ISO 14001 and EMAS. The three stages of the process correspond to the PDCA cycle as outlined below:

- Stage 1 (Plan): captures informal, ad hoc practices and the early emergence of sustainability awareness within operations
- Stage 2 (Do): involves formalising processes through the introduction of Standard Operating Procedures (SOP), staff training, and the establishment of routine monitoring practices

- Stage 3 (Check-Act): introduces systematic performance management through KPIs, targets, and aligning with ISO 14001, EMAS, GRI, and ETIS, positioning FMG-Light as a pathway toward full FMG certification

The framework is guided by four design principles: simplicity, credibility, comparability, and alignment with FMG's conceptual DNA. FMG-Light retains FMG's 40-30-30 weighting (Sourcing-Society-Environment), reflecting evidence that the hospitality sector's most material impacts occur upstream in the supply chain. Despite its structured design, limitations remain. The selected frameworks may narrow conceptual scope; prioritising low-effort actions risks oversimplifying complex systemic challenges; PDCA-based progression assumes capacities that some SMEs lack; and FMG's weighting may not fully reflect context-specific operational differences.

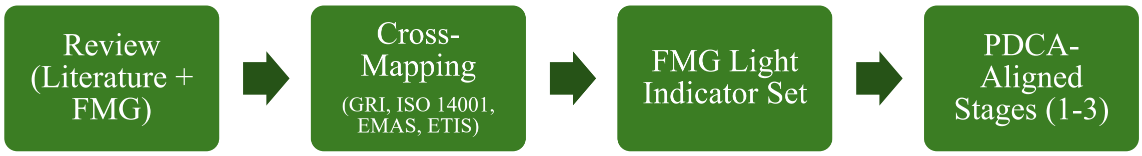


Figure 2: FMG-Light Development Process

# 6 Lowering the Entry Barrier: Developing the FMG-Light Sourcing Pillar - Benedetto Antonio Mayr

## 6.1 Introduction

This section looks at how sustainable sourcing can be implemented in the hospitality industry using a simplified, practical framework. Based on the broader group thesis, the focus is on the sourcing pillar of the FMG Standard, exploring how its four impact areas, *Celebrate Provenance; Support Farmers and Fishers; More Plant; and Better Meat and Sustainable Seafood*, can be adapted into an FMG-Light tool suitable for small- to medium-sized hotel operations. The analysis proceeds in four steps. First, a thorough review of the literature synthesises concepts from sustainable supply chain management (SSCM), local and seasonal sourcing, plant-forward and regenerative protein strategies, sustainable seafood, and ethical purchasing. Particular attention is paid to the Portuguese hospitality context. Secondly, these insights are translated into a set of measurable sourcing indicators. These are structured along a three-stage maturity model (awareness, integration and transformation) and are aligned with the logics of FMG, GRI, ETIS, and EMS/EMAS. Thirdly, the findings of ten semi-structured interviews conducted with Dolce CampoReal and the SRA are presented in a thematic format to evaluate the practicality and relevance of the initial FMG-Light V1 design. Thirdly, the findings of ten semi-structured interviews conducted with Dolce CampoReal and SRA are presented in a thematic format to evaluate the practicality and relevance of the initial FMG-Light V1 design. Finally, the discussion and recommendations sections reinterpret these findings through the lenses of SSCM and paradox theory, proposing a revised FMG-Light sourcing pillar (V2) as a transitional capability framework towards full FMG certification.

### 6.2 Literature Deep Dive

In the hospitality industry, "sourcing" refers to the structured process of selecting and acquiring the products, raw materials, and services that are essential for operational delivery. In food and beverage management, the decisions made at this stage influence not only product quality and consistency but also the environmental, social, and economic impacts across the supply chain (Kastenholz & Lopes De Almeida, 2008; Lopes et al., 2021; Mira et al., 2025). As concerns about sustainability gain global attention, the focus of sourcing has shifted from optimising cost and quality to integrating environmental stewardship and social responsibility. Panigrahi et al., (2019) argue that sustainability has become a defining trend in supply chain management, prompting organisations to adopt a triple-bottom-line approach to purchasing, logistics, and waste management. This mirrors the integrated sustainable operations cycle described by

(Linton et al., 2007), in which sustainability permeates all supply chain functions. Consequently, SSCM combines operational efficiency with long-term ecological and social goals, making it an increasingly prominent topic in hospitality research (Espino-Rodríguez & Taha, 2022; Genovese et al., 2017).

Within hospitality, the FMG framework operationalises SSCM into four sourcing impact areas: *Celebrate Provenance, Support Farmers and Fishers, More Plants, Better Meat, and Sustainable Seafood*. These pillars transform sustainability commitments into practical procurement strategies, linking sourcing practices to environmental integrity, social equity, and economic resilience (The Sustainable Restaurant Association, n.d.). Rising consumer expectations and regulatory pressures further reinforce the need for transparent and ethical sourcing (Prasanna et al., 2024). Sustainable sourcing can enhance organisational legitimacy, strengthen customer trust, and provide a competitive advantage (Modica et al., 2020). However, empirical studies demonstrate that the effective adoption of SSCM depends on internal leadership commitment and external institutional pressures, including regulations and stakeholder demands (Haldorai et al., 2025b). Therefore, understanding how these themes manifest in hospitality settings requires examining how global sustainability concepts translate into local operational contexts.

Local and seasonal sourcing is one of the most well-established SSCM strategies. It reduces transport emissions, supports local economies, and enhances culinary authenticity. Research suggests that regional suppliers can improve environmental performance and enrich the guest experience by fostering a sense of place, which is consistent with FMG's sourcing objectives (Legrand, et al., 2022; The Sustainable Restaurant Association, n.d.). However, the environmental value of local sourcing depends heavily on context. Distance is not always a reliable indicator of sustainability, as production methods, resource intensity, and seasonality can have a greater environmental impact (Vargas et al., 2021). For example, out-of-season greenhouse produce may have a higher carbon footprint than imports from regions with a similar climate. Therefore, the effectiveness of local sourcing increases when it is aligned with seasonal availability and biodiversity-supporting practices, such as promoting heritage varieties (Foster et al., 2014). Implementation challenges persist, particularly with regard to limited supplier capacity, fluctuating yields, and price volatility, all of which restrict procurement consistency (Oyedijo et al., 2024). Mitigation strategies include adaptive menu planning, multi-sourcing, buffer stocks, and long-term contracts (Mastos & Gotzamani, 2022). In Portugal, traditional chef supplier relationships form the basis of sustainable procurement, but increasing supply-chain homogenisation threatens these networks. A case study by The Sustainable Restaurant Association (2025) warns that global pressures could erode local provenance unless supported by structured initiatives. Consequently, Portuguese hospitality programmes are integrating FMG-aligned training to strengthen sourcing practices.

A second SSCM priority is transitioning towards plant-based and regenerative protein systems. Simon et al. (2024) highlight the importance of plant-based or hybrid protein diets in reducing emissions associated with food systems. FMG's *More Plants, Better Meat* initiative facilitates this change by advocating proportional rebalancing rather than exclusion, promoting the use of plant-based ingredients while sourcing animal proteins that are environmentally friendly and ethically produced. This environmentally motivated approach recognises that livestock, especially ruminants, contribute substantially to anthropogenic greenhouse gas emissions (Legrand, et al., 2022). Offering plant-based options by default, reducing portion sizes of animal proteins, and improving the quality of vegetable dishes can encourage more sustainable choices without compromising satisfaction (Reinders et al., 2020). Such practices necessitate close collaboration between procurement and culinary teams, emphasising the systemic interdependence of sourcing and menu design.

The concept of sustainable seafood applies this logic to marine ecosystems, emphasising traceability, responsible fishing, and low-impact aquaculture. However, marine sustainability is particularly complex due to temporal and spatial variations in stock levels (Legrand, et al., 2022), necessitating dynamic menu planning and frequent adjustments to species selections. Portugal's high seafood consumption amplifies these challenges; iconic species such as cod and tuna are culturally important yet have significant ecological impacts. Consequently, promoting underutilised species has gained attention as a strategy to reconcile cultural preferences with biodiversity protection (Murthy et al., 2023; Silva, 2022).

Ethical purchasing extends the concept of sustainability to the socio-economic sphere of SSCM. Fair trade establishes price floors and social premiums to safeguard producer income, and similar principles are applied by ethical procurement frameworks to sectors such as textiles and cleaning products. These practices rely on transparency mechanisms, including third-party certifications such as Fairtrade, the Rainforest Alliance and the Marine Stewardship Council (MSC) and Aquaculture Stewardship Council (ASC). Certification can enhance organisational legitimacy and appeal to consumers who are conscious of ethical issues (Panigrahi et al., 2019). However, certifications are often resource-intensive and inconsistent across regions, providing insufficient protection for producer welfare. Consequently, scholars advocate hybrid models that combine certification with long-term supplier partnerships and continuous monitoring.

The literature conceptualises sustainable sourcing in the hospitality industry as a dynamic, multi-scalar process that is embedded within socio-technical systems. Within an adaptive sustainability paradigm, the evolution of procurement decisions, menu design and supplier relations is interdependent, with environmental integrity, social fairness and economic viability operating as interconnected aims rather than competing ones. FMG’s four sourcing impact areas provide an integrative framework that operationalises these principles. In Portugal, the main challenge is to institutionalise historically informal sourcing practices within verifiable SSCM frameworks while striking a balance between authenticity, operational complexity and ecological responsibility.

### 6.3 Development of FMG-Light Sourcing Indicators

In the hospitality industry, operationalising sustainable sourcing requires translating broad sustainability commitments into measurable and actionable indicators. The FMG framework promotes this approach by identifying four key sourcing dimensions: *Celebrate Provenance, Support Farmers and Fishers, More Plants and Better Meat, and Sustainable Seafood.* Each dimension reflects a distinct aspect of supply-chain responsibility. However, SMEs often struggle to implement these principles systematically, particularly when data availability, supplier structures, or managerial capacity are limited. Therefore, developing an FMG-Light approach based on a limited number of low-effort, high-impact indicators provides a pragmatic entry point for structured sustainability management.

Such indicators are designed according to SSCM principles, integrating economic efficiency, environmental stewardship and social responsibility across procurement and production systems (Espino-Rodríguez & Taha, 2022; Panigrahi et al., 2019). Measurement serves as both a feedback mechanism and an indication of organisational commitment, both of which are essential in multi-tier hospitality supply chains that require verifiable, standardised indicators (Haldorai et al., 2025). Environmental management systems such as EMAS rely on quantifiable KPIs aligned with the PDCA cycle to ensure continuous improvement (Legrand, et al., 2022). When applied to sourcing, this logic necessitates the use of indicators that can evaluate current practices, facilitate organisational learning, and promote gradual alignment with certification frameworks.

The FMG-Light Sourcing Pillar is based directly on the EMS methodology and the maturity logic embedded in ETIS (Font et al., 2023). Both frameworks emphasise indicators that are simple enough to raise baseline awareness, yet robust enough to guide long-term transformation. FMG-Light therefore adopts a three-stage maturity structure, awareness, integration, and transformation, representing progressively higher levels of managerial sophistication, while avoiding the cognitive and administrative burden associated with full certification systems.

The awareness stage focuses on establishing fundamental traceability and transparency. This involves documenting local suppliers, defining "local", evaluating seasonal menu changes, and identifying plant-based and certified seafood options. These activities align with GRI 204 (Procurement Practices) and entry-level ETIS indicators, which prioritise local economic linkages and basic data collection (Global Reporting Initiative, 2016a). Evidence typically includes supplier lists, invoices, and menu descriptions.

The integration stage involves embedding sustainability considerations in operational decision-making processes. Key indicators include regular seasonal menu planning that is aligned with supply calendars, establishing medium-term relationships with small-scale producers, and carrying out more systematic verification of seafood sustainability claims. While these actions require moderate effort, they deliver significant benefits in terms of reducing carbon intensity, protecting biodiversity, and strengthening supply resilience (Legrand, et al., 2022; Simon et al., 2024). Aligning with GRI 308 and 414 highlights the importance of screening suppliers based on environmental and social criteria (Global Reporting Initiative, 2016b).

At the transformation stage, sustainability becomes embedded in organisational culture and is continuously monitored. This includes formal supplier codes of conduct, routine sustainability audits, and systematic performance reporting (e.g. the annual percentage of local procurement or certified seafood). These indicators reflect advanced governance practices that are consistent with the expectations of EMAS and FMG for full certification.

Based on this logic, the first operational draft of the FMG-Light V1 sourcing indicators was developed (see Table 1). Appendix 11 presents the full FMG-Light V1 table showing the sourcing dimensions, guideline questions and maturity stages, mapping each indicator to FMG criteria, GRI disclosures, ETIS indicators and EMAS components. This alignment ensures conceptual rigour while remaining accessible to SMEs with limited resources. The 13 proposed FMG-Light indicators fulfil the dual function of the SSCM/EMS of diagnostic assessment and capability building. Guided by the “low-effort, high-impact” principle, they strike a balance between quantitative measures (e.g. percentage of certified seafood; percentage of plant-forward options) and qualitative governance elements (e.g. sourcing definitions; supplier contracts). Threshold values were derived from ETIS (DG Enterprise and Industry, 2013), GRI standards, Food Made Good benchmarking data (The Sustainable Restaurant Association, n.d.), and empirical research (Legrand, et al., 2022; Reinders et al., 2020; Simon et al., 2024). Together, these indicate that thresholds such as 25% local procurement, 40% plant-forward composition, and 60% certified seafood are feasible and impactful. While the FMG-Light Sourcing Pillar is theoretically robust, its practical value ultimately hinges on its ability to adapt to various organisational contexts, a factor that must inform its evaluation.

| Indicator | Stage 1 - Awareness | Stage 2 - Integration | Stage 3 - Transformation |
|---|---|---|---|
| *Celebrate Provenance* | | | |
| **% local procurement** | Some ingredients occasionally sourced locally, but not tracked or defined | Local suppliers identified and used regularly for key ingredients | >25–50% of ingredients sourced locally; spend or volume tracked annually |
| **Local sourcing definition** | No formal definition; based on supplier reputation or proximity | Clear internal definition of 'local' (e.g., ≤250 km or within Portugal) | Definition embedded in procurement policy and supplier contracts |
| **Seasonal menu planning** | Occasionally adjusted based on availability | Menus change seasonally (2–4 times per year) using local supply calendrs | Menu planning fully aligned with supplier harvest/season cycles |
| **Communication of provenance** | Occasionally highlighted on menus or displays | Regularly promoted in menus and storytelling | Marketing strategy built around provenance and local identity |
| *Support Farmers and Fishers* | | | |
| **Direct trade relationships** | Occasionally or informally | Established relationships with small producers for key items | Direct-trade contracts or cooperatives in place |
| **Supplier partnership duration** | Purchases made ad hoc | Medium-term commitments (seasonal or annual) | Multi-year partnerships with stability and knowledge sharing |
| **Fair trade assurance** | Trust-based, informal agreements | Basic written agreements ensuring reliability | Formal procurement policies promoting fair pricing and collaboration |
| *More Plants, Better Meat* | | | |
| **Plant-forward menu share** | ≤20%, no structured approach | 30–40% plant-forward, reviewed seasonally | ≥50%, strategic shift supported by training and customer communication. |
| **Sustainable meat criteria** | Based on cost or availability | Some suppliers chosen for sustainability credentials | Clear sourcing policy prioritising certified, low-impact meat and dairy. |
| **Menu innovation** | Awareness exists, but no action | Pilot dishes or small menu section introduced | Integrated plant-forward design across the full menu. |
| *Sustainable Seafood* | | | |
| **Seafood species list** | No monitoring or documentation | Species tracked for main menu items | Seafood list managed with supplier sustainability input |
| **% certified seafood** | Supplier trust-based | Certificates (MSC, ASC) requested for key species | 100% traceable and certified seafood sourcing policy |
| **Biodiversity-friendly sourcing** | Occasionally | Promoted through special menus | Embedded in purchasing and culinary concept |

**Table 1:** FMG-Light V1 Sourcing Pillar

## 6.4 Findings

A thematic analysis of ten semi-structured interviews with managers and operational staff from Dolce CampoReal and the SRA revealed four recurring patterns that characterise the hotel's current sourcing environment. In line with the approach outlined in the methodology chapter, these themes were derived through iterative coding (see Appendix 12), constant comparison and the aggregation of meaningful patterns across departments. These themes reflect how sourcing decisions are made regarding provenance, supplier engagement, menu composition, and verification.

**Locality as an informal operational routine:** Across departments, respondents described local sourcing as a common and well-established practice rather than a formalised sustainability policy. The Head of Procurement and Executive Chef noted that several ingredients, including honey, pastry items, wines, and citrus fruits, are obtained from regional suppliers. However, the interview data revealed substantial variation in the definition of "local". Some interviewees referenced administrative boundaries (e.g., "Torres Vedras area"), whereas others mentioned approximate distance criteria such as "around 50 kilometres" (see Appendix 8).

These practices appear to be largely driven by established supplier relationships and product availability, rather than by targets or criteria based on indicators. Although supplier lists are maintained to meet Green Key documentation requirements, respondents emphasised that these records are not linked to measurable spending percentages or regular performance tracking. Menu adjustments in response to seasonal availability were described as occurring “three times per year”, yet these changes are considered operational routines rather than formalised sustainability strategies. ***Summary:*** *At Dolce CampoReal, local and seasonal sourcing is achieved through informal routines and long-standing relationships with suppliers, rather than through defined policies or measurable sustainability indicators.*

**The influence of volume and governance on supplier selection:** The second theme concerns the structural conditions through which procurement volume requirements and governance arrangements influence the selection of suppliers. The Food and Beverage (F&B) Director explained that group catering is a major source of revenue and requires consistent portion sizes and guaranteed high-volume availability. He illustrated this by stating that „if a menu includes sea bream, we need 200 consistent "portions“, a volume that small-scale local producers seldom have the capacity to provide (see Appendix 3). Consequently, the hotel often relies on national distributors who can ensure a stable supply.

Interviewees also described a multi-level governance framework involving the management company (DHM) and the Wyndham brand. The Head of Procurement noted that, while daily ordering takes place at hotel level, framework contracts for major product categories are negotiated centrally (see Appendix 8). The General Manager added that budget allocations for sustainability measures compete with operational expenditure, stating that 'price is the primary criterion', followed by assessments of product quality (see Appendix 1). ***Summary:*** *The sourcing of core menu items is shaped by volume requirements and centrally negotiated procurement contracts, making it difficult to integrate products from small-scale local suppliers.*

**Menu composition and operational adjustments:** The interview data suggest that decisions regarding menu composition and service format are primarily influenced by considerations of operational efficiency and cost structures. The F&B Director noted that buffet service tends to be favoured due to staffing efficiencies, explaining that „serving a set menu for 50 guests requires around eight waiters, whereas a buffet requires about four“ (see Appendix 3). Within this buffet structure, plant-based dishes are routinely provided alongside meat and fish options.

The Executive Chef described a series of „menu engineering“ practices used to manage supply volatility and cost variability. These include deploying "Chef's Selection" menus and using substitution strategies, whereby the protein component of a dish changes while the garnish remains the same. Respondents characterised these techniques as practical ways of maintaining consistency in the guest experience and controlling food costs. Regarding meat procurement, the General Manager noted that organic or high-welfare products are rarely purchased due to budget constraints linked to the hotel's corporate client base (see Appendix 1). ***Summary:*** *The menu design and service formats prioritise operational efficiency and cost management. Plant-*

*based options are integrated as standard offerings, and substitution strategies are used to manage supply fluctuations.*

**Verification methods and data availability:** The final theme relates to the availability of sourcing-related data and existing verification mechanisms. Respondents consistently reported the absence of internal systems capable of validating provenance or seafood sustainability beyond supplier declarations. As the Executive Chef noted, „We do not have a clear method to verify sustainability. We rely on what suppliers tell us" (see Appendix 2).

The Head of Procurement confirmed that, although supplier lists are maintained for compliance audits, the hotel does not collect or analyse granular data such as carbon footprints, food miles or third-party certification statuses (e.g. MSC/ASC). Similar gaps are evident in waste management data: according to the General Manager, external waste contractors 'do not provide weighed data for food waste', which limits the hotel's ability to analyse waste streams or report specific metrics (see Appendix 1). ***Summary**: Sustainability monitoring currently relies primarily on assurances from suppliers and basic compliance documentation. There is limited access to quantitative verification data or formalised tracking systems.*

## 6.5 Discussion

Empirical evidence reveals a significant gap between the ideals of SSCM and the operational constraints of mid-sized hospitality enterprises. Although academic literature frequently presents sustainable sourcing as a strategic leadership function (Panigrahi et al., 2019), the analysis reveals that implementation is limited by systemic constraints related to scale, governance, and data maturity. This suggests that the primary barrier to integrating sustainability is structural rather than motivational. Relying on fixed compliance standards can result in a lack of alignment between reporting and operational reality. The findings therefore support a reframing of sustainability assessment, shifting from a binary audit of performance to a developmental process that navigates, rather than suppresses, organisational paradoxes.

The conflict between the need for consistency in large-scale hospitality and the variability of local production reflects a classic structural paradox (Smith & Lewis, 2011). In the case of Dolce CampoReal, the operational need for efficiency of scale systematically limits the feasibility of small-scale or artisanal sourcing. This is in tension with the legitimacy gained through provenance-based procurement (Legrand, et al., 2022). Standard indicators that prioritise „local procurement percentages“ do not account for this volume barrier and may penalise operations for structural characteristics rather than sustainability intent (Oyedijo et al., 2024). However, the analysis also suggests that menu flexibility, such as protein substitution and „Chef's Choice“ formats, functions as a potential sustainability capability. Reinders et al., 2020) emphasise that this kind of adaptability is crucial for managing supply volatility. This extends SSCM theory by proposing that adaptability, rather than proximity alone, should be considered a fundamental aspect of sustainable sourcing capability. For FMG-Light Framework, this implies shifting the focus from auditing static procurement targets to evaluating operational practices that help reconcile the efficiency–legitimacy paradox.

The governance structure (Owner-Brand-Management) identified in the findings reveals a discrepancy between managerial responsibility for sustainability outcomes and the authority to implement changes to the supply chain. Unit-level managers operate within a framework that can be described as „boundaried autonomy“, where a commitment to sustainability exists but is limited by centralised contracting structures (Haldorai et al., 2025). This reinforces the insights of Systems Thinking, which argue that interventions must target the correct leverage points within a system . Using supply chain indicators based on local contracting authority with managers operating without such authority creates an institutional decoupling: although sustainability objectives may be defined, they cannot be implemented (Genovese et al., 2017). A FMG-Light Framework must distinguish between the Zone of Control, which encompasses internal policies, communication, menu design and waste practices, and the Zone of Influence, which covers supplier selection and contractual terms. A staged approach is therefore required, one that strengthens internal governance practices before attempting to influence externally controlled supply networks (Edwards, 2021).

The reliance on trust-based verification revealed by the findings highlights a significant data maturity gap. According to Signalling Theory, the absence of verifiable information, such as seafood certification or waste metrics, undermines an organisation's ability to communicate credible sustainability messages to the guests (Bernard & Nicolau, 2022; Spence, 1973). This makes the organisation vulnerable to accusations of greenwashing (Matos et al., 2020). However, the lack of data does not indicate disengagement, but rather reflects an early developmental stage. Much of the SSCM and certification literature assumes the existence of structured data streams, which SMEs often lack (Legrand, et al., 2022). This highlights the importance of maturity models (Assoratgoon & Kantabutra, 2023), which view the adoption of sustainability as progressing from awareness to integration and transformation. In this context, the purpose of the FMG-Light framework is not to audit performance, but to develop foundational capabilities. Early-stage indicators should therefore prioritise the creation of an inventory, definitional clarity, and risk awareness. Without this foundation, performance-based certification acts as a barrier to entry rather than a catalyst for improvement.

Taken together, the findings demonstrate that, in this context, sustainable sourcing is shaped by the interplay of paradoxes concerning scale, autonomy and information. These structural tensions call into question the effectiveness of one-size-fits-all compliance standards, instead supporting the theoretical necessity of transitional frameworks that bridge the gap between informal routines and certification readiness. Such frameworks can transform sustainability from an overwhelming external mandate into a manageable organisational evolution by validating adaptive operational practices, acknowledging governance boundaries and scaffolding data maturity.

### 6.6 Recommendations

The findings and discussion demonstrate that, in mid-sized hospitality enterprises, sustainable sourcing is less constrained by intention than by structural barriers, specifically scale dependencies, limited autonomy within corporate governance and low levels of data maturity. These systemic limitations create a persistent implementation gap between the expectations embedded in comprehensive sustainability frameworks and the operational realities of hotels such as Dolce CampoReal. Version 2 of the FMG-Light Sourcing Pillar therefore requires more than just minor adjustments to individual indicators; a complete rethink of what „early-stage sustainability“ realistically entails in this organisational context is needed.

A key finding arising from the empirical data is the paradox of scale. The hotel's reliance on high-volume group business means it is unable to source products from small-scale producers, even when local provenance is valued. As the discussion shows, this reflects the common efficiency–legitimacy tension in hospitality operations. FMG-Light V2 therefore moves away from rigid performance quotas at an early stage, recognising adaptive menu capacity, such as substitution practices and plant-forward adjustments, as legitimate sustainability capabilities. This approach avoids penalising hotels for constraints inherent in their business model, instead reframing operational flexibility as an asset rather than a deviation from sustainability expectations.

The second structural barrier relates to bounded autonomy. Although unit-level managers express sustainability intent, they operate within a constrained governance environment where supplier contracts and product portfolios are determined centrally. Traditional certification-style indicators often assume a degree of supply-chain control that frontline managers do not possess, resulting in institutional decoupling. FMG-Light V2 therefore clearly differentiates between what hotels can control internally, such as definitions, documentation, menu choices and communication, and what lies within their broader zone of influence. Early-stage requirements focus on internal processes, while later stages reward progression towards supplier engagement and governance alignment, where feasible.

The third systemic tension is the data maturity gap. The findings reveal a widespread reliance on trust-based verification and fragmented procurement records, as well as a lack of species-level data for seafood. From a signalling-theory perspective, this undermines the credibility of sustainability claims and exposes hotels to reputational risk. FMG-Light V2 therefore restructures the Awareness stage to focus on baseline visibility, emphasising inventories, basic definitions, and documentation of existing practices. Only once this foundational architecture has been established do the Integration and Transformation stages introduce verification processes and measurable targets. This staged progression reflects the logic of a maturity model and ensures that the sustainability assessment process is developmental rather than punitive. To synthesize these structural adjustments, Table 2 illustrates the specific evolution from the initial draft to the refined capability-based framework.

| Indicator Area | FMG-Light V1 | Field Reality | FMG-Light V2 |
|---|---|---|---|
| | | | |
| **Local Sourcing** | **Metric-based:** Required rigid quotas (e.g., "% of spend within 50km"). | **The Volume Barrier:** High-volume catering prevents reliance on small producers | **Capability-based:** Focus on Menu Adaptability (e.g., "Chef's Choice") and defining "local" internally. |
| **Sustainable Seafood** | **Verification-based:** Required specific % of MSC/ASC certified seafood. | **The Data Gap:** Suppliers do not provide certification data; purchasing is trust-based. | **Inventory-based:** Focus on Inventory Creation to build visibility before asking for certificates |
| **Menu Composition** | **Product-based:** Focused on procuring "Better Meat" (organic/free-range). | **The Budget Constraint:** Cost pressures limit premium proteins in buffet settings. | **Process-based:** Validates Substitution Strategies (swapping proteins) and Plant-Forward options. |
| **Supplier Engagement** | **Contract-based:** Required formal screening of suppliers. | **Boundaried Autonomy:** Framework contracts are negotiated centrally (DHM/Brand) | **Communication-based:** Focus on Internal Ordering Protocols instead of supplier auditing. |
| | | | |

**Table 2:** Key Differences Between FMG-Light V1 and V2

Taken together, these refinements establish FMG-Light V2 as a transitional capability framework grounded in the practical realities of hospitality SMEs, rather than as a streamlined version of an existing certification. The revised structure acknowledges paradoxical tensions, respects governance boundaries, and actively supports the development of sourcing capabilities. By aligning indicator expectations with actual organisational constraints, FMG-Light V2 becomes feasible for early adopters while remaining meaningful as a development pathway towards full certification. The complete, detailed framework, incorporating all updated questions and maturity-stage requirements, is presented in Appendix 13.Cross-Pillar Synthesis and Discussion

Previous analyses of the Sourcing, Society, and Environment pillars considered each domain as an independent operational field. However, interpreting these dimensions independently can obscure the deeper systemic mechanisms that influence sustainability performance in hospitality SMEs. Empirical evidence from Dolce CampoReal shows that the barriers to implementing sustainability do not originate within the individual pillars, but within the organisational system connecting them. A consistent pattern emerged from interviews, site observations and operational documents: unit-level managers have a strong desire to operate sustainably, but this intention is repeatedly hindered by structural rigidities. Examples include the chef’s willingness to adapt menus, the maintenance manager’s personal commitment to reducing energy consumption, and the HR team’s informal strategies for integrating diverse staff. These reflect an organisation rich in latent sustainability capability. However, these efforts remain isolated and do not result in measurable progress because the surrounding systems, centralised procurement structures, fragmented data infrastructures, and the limited autonomy of local managers, do not enable them to be formalised. In other words, the core constraints are systemic rather than motivational.

Traditional sustainability frameworks are based on an „audit logic“ that presupposes autonomy, data maturity and managerial discretion (Font et al., 2023; Legrand, et al., 2022). However, these assumptions rarely hold in mid-market hospitality operations. When such frameworks are implemented in a governance environment characterised by centralised contracts, externally controlled waste systems and inconsistent data flows, stagnation rather than transformation ensues. Therefore, FMG-Light V2 cannot merely function as a simplified checklist; it must act as a transitional governance mechanism that develops the organisational capabilities required for effective sustainability management. The following synthesis, drawing on Paradox Theory, Staged Change Models and Signalling Theory, explains why such a developmental model is necessary and how it responds to the structural realities identified in the empirical data.

Three interconnected structural tensions emerged across all pillars that fundamentally shape how sustainability initiatives are constrained, interpreted and enacted at Dolce CampoReal. These tensions form the conceptual basis for the FMG-Light V2 developmental framework.

The first tension concerns the paradoxical relationship between efficiency and legitimacy. According to Paradox Theory  (Dongxian & Batool, 2024; Sahadev et al., 2024), sustainability is not a problem that can be definitively solved, but rather a persistent tension that must be navigated. Dolce CampoReal's economic logic is based on high-volume efficiency, involving predictable quantities, standardised offerings, and optimised labour allocation. In contrast, the logic underlying many global sustainability indicators emphasises legitimacy derived from provenance, seasonality, and supply-chain transparency. These logics collide in practices such as sourcing fish for corporate groups. The requirement for "200 consistent portions of sea bream" cannot be met by local artisanal fishers, regardless of their intentions. Similarly, the buffet format, essential for labour efficiency, makes waste quantification structurally impossible. In this context, applying standard performance indicators penalises organisations for their business model rather than their sustainability ambition. This reveals the need for FMG-Light V2 to shift its evaluative focus from structural outputs to adaptive capabilities. By rewarding menu flexibility, substitution practices, and behavioural interventions, the revised framework acknowledges that sustainability in high-volume operations is achieved through managerial agility rather than bespoke procurement practices.

The second structural tension relates to the misalignment between authority and responsibility. Institutional theory's notion of "decoupling" (Meyer & Rowan, 1977) describes how organisations adopt sustainability language symbolically without being able to implement corresponding actions due to structural constraints. At Dolce CampoReal, for example, DHM negotiates procurement frameworks centrally, leaving no meaningful opportunity for local sourcing decisions. Waste management contracts are held by the condominium administration, preventing the hotel from weighing food waste or separating waste streams. HR practices related to compensation and benefits are determined at the group level, limiting the hotel's ability to tailor social initiatives. This governance structure holds unit managers responsible for outcomes over which they have little control, resulting in institutional paralysis. FMG-Light V2 addresses this issue by distinguishing between indicators that fall within the Zone of Control and those in the Zone of Influence. This recalibration ensures that expectations alignset early stage with local managers actual authority, reducing frustration and enabling the development of capabilities in small steps before attempting systemic interventions.

The third tension relates to the data maturity gap, which emerged as the most prevalent cross-pillar barrier. The transition from informal routines to formal verification proved to be the primary developmental bottleneck across Sourcing, Society, and Environment. Sourcing relies heavily on verbal assurances from suppliers rather than documented traceability, environmental metrics are collected for compliance purposes but rarely analysed, and social engagement outcomes are informal, anecdotal, and impossible to measure. From a signalling theory perspective (Spence, 1973), Dolce CampoReal cannot produce credible sustainability signals because the underlying data architecture necessary for verification does not yet exist. Asking an organisation without functioning data systems to provide advanced KPIs, such as seafood species inventories or waste diversion ratios, leads not only to estimation and guesswork, but also to disengagement. FMG-Light V2 addresses this developmental challenge by recognising data scaffolding as a valid sustainability outcome. During the Awareness stage, activities such as defining "local", creating a supplier list or documenting the number of seafood species count as meaningful progress. Only once these foundational systems are in place does the framework introduce quantitative requirements.

These structural tensions demonstrate that the sustainability of hospitality SMEs cannot be evaluated solely through performance outcomes. Instead, organisations require a framework that recognises structural constraints and builds foundational capabilities, gradually preparing them to meet global standards. FMG-Light V2 embodies this developmental logic, acting as a scaffold rather than a gatekeeper

# 7 Recommendations and Conclusion

## 7.1 Recommendations

Three strategic recommendations have emerged from the synthesis of the empirical findings, the expert interviews and the developmental logic of FMG-Light V2.

The first concerns implementation. For FMG-Light to be both viable and scalable within the SME segment, it must be delivered as a tech-enabled, digital-first self-assessment ecosystem. During the interview with the SRA Expert, it was confirmed that the cost of external verification, estimated at approximately £1,000 per consultant day, renders traditional assessment models inaccessible (see Appendix 10). Furthermore, the lack of time at the operational level necessitates solutions that minimise administrative burden. FMG-Light should therefore integrate AI-driven evidence collection. Menu photos, supplier invoices or waste logs could be scanned to automatically extract plant-forward ratios, identify red-listed species or quantify waste streams. This automation reduces assessment friction and builds reliable data streams that support progression into higher maturity stages.

The second recommendation relates to the tool's learning function. While traditional certifications act as judges, FMG-Light must function as a teacher. Interviews revealed that knowledge gaps, rather than resistance, impede progress. Therefore, the assessment interface should be tightly integrated with the SRA Knowledge Library. Low maturity scores should trigger dynamic recommendations, such as case studies, templates, or micro-learning modules, which are tailored to the user's specific capability gap. Gamified maturity scoring can reinforce engagement by visualising progress and enabling constructive peer comparison. This transforms the assessment from a one-off judgement into a guided learning journey, shifting the SRA's role from that of an auditor to that of a developmental partner.

The third recommendation relates to systemic governance alignment. The findings show that managers are held accountable for outcomes that are beyond their control due to centralised procurement systems, external waste contracts and group-wide HR policies. Without granting unit-level managers defined discretionary authority over budgets, contracts, or procedures, sustainability ambitions will remain confined to the integration stage. Therefore, owners and management companies should introduce a "Sustainability Discretionary Mandate" that grants local managers a defined scope of autonomy, such as a percentage allowance for local sourcing or a dedicated sustainability budget. This ensures that the Transformation stage of FMG-Light corresponds to realistic managerial agency rather than idealised assumptions.

Together, these recommendations establish FMG-Light V2 as a credible, scalable governance tool that can bridge the implementation gap for the mid-market hospitality sector. By respecting systemic constraints while progressively building capabilities, the framework redefines sustainability as structured organisational development rather than immediate compliance.

## 7.2 Conclusion

This project aimed to address the structural mismatch between comprehensive sustainability certifications, most notably the FMG Standard, and the operational realities of SMEs in the hospitality industry. Although sustainability frameworks can generate legitimacy, transparency, and performance discipline, they implicitly assume the existence of mature data systems, autonomous procurement structures, and formalised routines, all of which are lacking in many mid-market hotels (Font et al., 2023). Field testing of FMG-Light V1 at Dolce CampoReal confirmed the existence of this implementation gap. The study found that the barriers to adoption were systemic rather than motivational, rooted in three recurring tensions: the Paradox of Scale, Boundaries Autonomy, and the Data Maturity Gap. These structural constraints undermined the validity of performance audits, encouraged estimation over measurement, and created a disconnect between sustainability ambitions and operational execution.

The study advanced sustainability governance theory by redefining certification as a capability-development process rather than a binary compliance instrument. FMG-Light V2 introduced a Staged Maturity Model comprising Awareness, Integration, and Transformation stages. This demonstrated how sustainability emerges progressively through definitional clarity, routinisation, and eventually, performance verification. This shift in focus prompted a shift in academic discourse, from inquiries into the reasons for SMEs non-compliance to explorations of the mechanisms by which systems can impede capability development. For practitioners, the validated framework furnished SMEs with a viable and trustworthy approach to engage with sustainability standards. By anchoring early-stage indicators in the manager's Zone of Control, FMG-Light avoided penalising organisations for structural constraints by replacing unrealistic KPIs with developmental milestones. It provided a scalable tool for operators, management companies, and certification bodies seeking to increase uptake of sustainability measures in the mid-market.

However, the study used a single-case qualitative design in Portugal, limiting its generalisability. Constraints on data availability and reliance on self-reported practices may also have introduced bias. Further research should test FMG-Light across diverse hotel categories and governance structures, quantify its impact on sustainability outcomes over time, and explore digital solutions that automate data collection to strengthen early-stage maturity.

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# 9 Appendix

**Appendix 1:** Face-to-Face interview with General Manager of Dolce CampoReal Pedro Magalhães (GM), conducted on 18.11.2025 by Nora Profanter (N), Joana Frisch (F) and Benedetto Mayr (B)

**GM:** It has become increasingly difficult for us to complete our internal teams. The hospitality industry is not very competitive nowadays in terms of salary and work–life balance. Many people work on holidays, weekends, Christmas, New Year's Eve. A lot of employees go abroad because they find better opportunities. So we have to adapt and stay flexible. That is why we work with a partner company that provides waiters and cooks for specific hours or periods.

We have around 85 to 90 employees in the hotel, excluding the golf department. Our business is mainly groups and events, but we are also putting effort into becoming more attractive for leisure guests. No one goes on Google or Booking.com looking for holidays in this region, because the destination is not yet recognised. So, we try to make the hotel itself a destination.

The hotel has around 15 to 20 years of history, with several complexities in its background. Right now, I believe we are on a good path. Sustainability is a significant challenge. It can be viewed as a business topic but also as an educational challenge for employees. During busy periods, for example, when we have 400 guests, it is difficult to keep everyone aligned. We try to educate guests as well, but some respect the rules, and some do not. In food waste, for example, guests behave very differently depending on whether they are leisure or corporate.

We have been part of the Green Key certification for about five years. Each year it becomes more challenging. We would like to do more, but we need time, people and budget. Sustainability requires daily attention.

**B:** You belong to DHM and Wyndham. How does that work in terms of decisions?

**GM:** The property is owned by Explorer Investments. DHM is the management company operating the hotel. The Dolce brand belongs to Wyndham, so we must comply with Wyndham standards. These three are separate but connected. We always have to comply with Wyndham's standards.

**N:** DHM has its sustainability roadmap, and Wyndham has its own certification levels. How do you decide where to focus?

**GM:** Both are important. Even if the frameworks differ slightly, they lead to similar goals. We work to comply with both. The bigger challenge is the hotel's age. Many systems need renewal to improve efficiency. For example, we need to replace our sealer machine, which costs around €200,000. The investment is high, but the energy savings will come later. Some sustainability goals cannot be achieved without significant investment.

**J:** Do all DHM hotels adopt similar sustainability initiatives?

**GM:** It varies. Within DHM, we are grouped with other MICE and corporate-oriented hotels. For example, Ramada, Dolce and Crowne Plaza work together on circular economy initiatives. We try to use the same suppliers to negotiate better prices and equipment.

We also focus on local suppliers, supporting the regional economy. DHM has a central procurement department, and we align with them whenever possible.

**N:** Regarding outsourced labour: is this seasonal or all year?

**GM:** All year. Whenever occupancy or restaurant demand is high, we request additional staff. We try to work with the same people whenever possible.

**B:** How do you ensure fair practices from outsourced staff?

**GM:** We have a contract with the company, and they have contracts with the workers. They must comply with standards regarding appearance, punctuality and respecting operational procedures. It is not 100% perfect, but normally it works well. If the service is good, we continue the partnership. Our HR coordinator, Melissa, tracks KPIs such as turnover.

**J:** Do you have partnerships with community organisations?

**GM:** Yes. During the fire season, we donate water, cookies and energy bars to the fire brigade. At Christmas, we run an internal donation initiative: employees bring items that we pass on to local associations. We also work with an association supporting vulnerable children. Around 30 children spend Christmas here with us each year. They come to our restaurant free of charge, meet Father Christmas, and receive gifts chosen based on wish lists. Other DHM hotels also run their own initiatives, like beach clean-ups or helping rebuild houses after floods.

**N:** What do you expect from Green Key beyond marketing?

**GM:** It helps educate employees and gives structure. Guests increasingly ask about sustainability practices, especially groups. Green Key provides a framework to organise our initiatives.

**J:** Was it difficult to start with Green Key?

**GM:** At the beginning, it is relatively easy. After several years, the requirements become more demanding. This year we struggled because some tasks depend on external suppliers. For example, the waste company does not weigh food waste, and since they are contracted by the condominium, we cannot directly influence their procedures.

**B:** What happens if you fail Green Key requirements?

**GM:** Failure is not an option. Losing the certification would be very damaging for our image. Once we are in, we must maintain it. We put pressure on ourselves to comply each year.

**J:** Was continuing with Green Key your decision or Explorer's?

**GM:** It was my decision to continue. We already had a history with it, and even as it became more demanding, we realised we were doing good work and that it helped us improve. On the golf course, we have five or six artificial lakes that collect rainwater for irrigation. This greatly reduces our water consumption. We buy more environmentally friendly products, even though they are more expensive. I would say around 90% of our products follow good practices.

In energy, we invested around €10,000-15,000 in LED lighting this year.

In the rooms, bedsheets are only changed on the third day unless requested otherwise. For pool towels, we give guests a towel card so towels are not automatically placed in the room.

In F&B, we weigh food waste. Seeing the numbers changes behaviour. We only offer buffets for groups above 30 people; below that, it creates too much waste. Even for buffets, we use smaller quantities and refill more often.

**N:** Do guests follow sustainability guidelines?

GM: Not always. Leisure guests often ignore towel reuse instructions. Around 70–75% still leave towels on the floor. Their mentality is, "I am on holiday, I am paying, I want new towels."

Breakfast behaviour is also different: leisure guests take large amounts of food; corporate guests eat less and faster. We used to put robes in rooms. If the robe was there, almost everyone used it. If it wasn't, only about half requested one. These small decisions help reduce unnecessary consumption.

**B:** Do you see a financial return from sustainability investments?

**GM:** Yes, but always after initial investment. Training people, buying better equipment, supervising new processes, all require resources. Products that are more sustainable are often more expensive. For example, paper bin liners are three times more expensive than plastic. I cannot give exact numbers on savings from Green Key, but I am certain that it helps, in cleaning, energy and staff time. It would be helpful to measure it more precisely in the future.

**J:** Why choose Green Key instead of the Food Made Good (FMG) Standard?

**GM:** Because Green Key covers the whole hotel. FMG is very useful but focuses mainly on F&B. If we could, we would also invest more deeply in FMG for the restaurant, but Green Key gives us the overall structure.

**B:** Our thesis is developing a low-barrier "FMG-Light" pathway with low-effort, high-impact actions in the first stage. What do you think of that type of certification model?

**GM:** I think it makes a lot of sense. A lower entry level motivates hotels to start. Once they begin, they can progress to more complex tasks. Full FMG is overwhelming for many hotels. A staged pathway would be helpful. We cannot hire a dedicated sustainability officer because of budget constraints. Department heads take responsibility instead. A structured pathway would help them a lot.

**N:** Do you see sustainability as part of ESG compliance?

**GM:** Yes. Not complying with sustainability practices will create financial and reputational risks in the future. Consumers expect responsible behaviour across all industries. There should be a specific sustainability budget, similar to marketing. Six Senses is the best example: they allocate 5% of revenue to sustainability. They have farms, bees, specialists, and excellent storytelling. Their brand attracts guests because of sustainability. For our hotel, 5% would be too high, but a smaller budget allocation would be feasible and valuable. This would likely be decided at the Explorer level.

Explorer has an ESG specialist who visits the hotels and provides guidance, including on Green Key.

**J:** We emailed you some document requests. Are supplier contracts or procurement sustainability policies accessible?

**GM:** Some may be restricted, but I will check what is possible.

**N:** Could we visit the kitchen and housekeeping for our research on waste?

**GM:** Yes. We will coordinate with the head chef and with Hugo, who is the F&B supervisor. The head chef does not speak English but speaks French. If needed, our front office manager can assist with translation. Tomorrow is likely the best day to visit the kitchen.

**B:** Thank you very much for your time and all the insights.

**GM:** You are welcome. If you need anything tomorrow, please let me know.

**Appendix 2:** Face-to-Face interview with Head Chef Jorge Ferreira (HF), conducted on 18.11.2025 by Nora Profanter (N), Joana Frisch (J) and Benedetto Mayr (B)

**B:** To begin, we would like to ask about your suppliers. How do you define "local" in terms of distance or region?

**HF:** We belong to the Lisbon district, and our priority is to source from suppliers within the surrounding council. For Green Key certification, it is mandatory to provide evidence of at least three local suppliers.

**J:** So, you already fulfil that requirement?

**HF:** Yes. For example, we have local suppliers for fruit, red fruits, meat, and also wine. There are many wineries in the area, and we work with several of them.

**B:** Can you estimate the percentage of ingredients that are seasonal?

**HF:** The maximum we can reach is around 40% seasonal ingredients.

**N:** And how many times per year do you change your menu?

**HF:** Three times per year, including an adjustment for winter.

**J:** Do you have a defined proportion of vegetarian or plant-based dishes?

**HF:** Yes. We always include plant-based options: one entrée, two main courses, and one dessert. These options are fully plant-based, not just vegetarian.

**B:** Do many guests request vegetarian or plant-based meals?

**HF:** Yes, many. It is very difficult for us, especially in à-la-carte service and for guests staying multiple days. We often need to propose chef's suggestions rather than having numerous fixed plant-based items.

**N:** Do you adapt dishes by substituting the protein, for example replacing chicken with tofu?

**HF:** Yes, very often. We keep the rest of the plate unchanged and replace only the protein.

**J:** And for the buffet?

**HF:** For the dinner buffet, we always offer: one plant-based protein, two fish options, two meat options. Side dishes such as rice, vegetables, and soups are all plant-based.

**B:** Do you still buy from small family farms or neighbours?

**HF:** In the past, yes. But today those small local producers no longer exist, so it is no longer possible.

**J:** How do you verify that the meat or seafood you source is sustainable?

**HF:** That is exactly the issue. We do not have a clear method to verify sustainability. We rely on what suppliers tell us.

**N:** Do you work with sustainable farms?

**HF:** Not specifically. But we are supported by Blinky Certification, which helps us identify at least three local suppliers with good practices.

**B:** Are there particular seafood species you use most?

**HF:** Not really, nothing specific.

**B:** Do you communicate your sustainability efforts to guests?

**HF:** Not proactively. We only communicate when guests ask. Previously, with our Olive Arch Basement, we had more time to explain dishes. Now, with buffets and standard à-la-carte or snack restaurants, this is more difficult.

For groups or events, or in brochures, we include sustainability information. Sometimes we provide an A4 document summarizing these practices.

**J:** In the DHM Sustainability Report, it is mentioned that a Supplier Code of Conduct will be implemented in 2025. Will this apply to F&B sourcing?

**HF:** It depends on the department. For example, Wyndham requires us to buy some products, like room amenities, from specific suppliers abroad, so we cannot apply the internal DHM Code of Conduct to those items. However, DHM Procurement does provide sourcing guidelines, and they distribute these to us at the hotel level.

**N:** Do you track any KPIs related to sourcing? For example, the percentage of local products or certified suppliers?

**HF:** I cannot give precise numbers. We do not receive this information regularly. But Ricardo, our Head of Procurement, should have three or four KPIs, because Green Key requires evidence of good supplier practices.

**HF:** For example, our gardening team, an external company, also has to comply with sustainability requirements.

**HF:** We serve many guests with specific dietary needs. We always offer fruit, salads, and at least one or two suitable main options. Desserts also include alternatives.

We also organise themed weeks based on the nationalities of our guests, such as Brazil or Germany (Oktoberfest), to reflect their preferences.

**N:** How do you train your team?

**HF:** Training is conducted on the job. It is not informal; it follows a procedure. For example, if someone prepares excessive quantities of French fries, the Head Chef intervenes immediately to correct the behaviour and prevent waste. The kitchen is always under pressure: service, events, buffets, snacks. Supervision is essential. I am very careful about FIFO (first in, first out). If I am absent, others may not follow it correctly, which increases waste risks.

**HF:** We are very strong in events. Our lowest DDR (Daily Delegate Rate) is approximately €90 per person per day, which includes: morning meeting room, morning coffee break, lunch, afternoon coffee break. For this lowest price tier, clients cannot choose the lunch menu. We provide Chef's Selection, which allows us to serve three or four different groups the same lunch. This achieves economies of scale, reduces waste, and maximises revenue. The team cooks larger quantities of the same dishes, which is very efficient.

**J:** How do you manage food waste?

**HF:** When there are leftovers from the buffet, we try to reuse them whenever possible—for example by incorporating recovered ingredients into cakes or other items. You may even see such a cake at breakfast tomorrow. Our goal is always to maximise reuse and minimise waste.

**Appendix 3:** Face-to-Face interview with Director of Food & Beverage Hugo Simão (F&B), conducted on 18.11.2025 by Nora Profanter (N), Joana Frisch (J) and Benedetto Mayr (B)

**J:** Could you describe your role in the sustainability practices within the F&B department? Do you work closely with the Head Chef?

**F&B:** Yes. The F&B and kitchen teams collaborate closely, especially regarding procurement. Together with the purchasing team, we assess suppliers and sourcing practices. At Dolce CampoReal, approximately 98% of our suppliers are considered local. Although some companies do not have their headquarters in the region, they maintain facilities and employ local staff. This creates conditions for regional development through employment and operational presence.

**N:** When selecting suppliers, how important are sustainability criteria? Do you request documentation of their sustainability initiatives?

**F&B:** We do request sustainability information, but in practice price is the primary criterion. After price, we consider quality, and only then sustainability practices. Even when a supplier has excellent sustainability standards, the product becomes unviable if the price is much higher. Sustainability, therefore operates as a third-level criterion in daily procurement decisions.

**B:** From your perspective, are guests willing to pay more for local or sustainable products?

**F&B:** It depends on the guest segment. Some guests value transparency and product storytelling, such as cheese from a nearby farm or wine from a small local producer and may pay more. Personally, I would pay more myself in such cases. A useful example is the wine Xpuleu from Alentejo, which became fully organic five to six years ago. As yields decreased, the price increased from €12 to €18 per bottle. This shows the financial implications of organic production. Offering exclusively organic products is not feasible in hotel operations due to the budget limitations of guests.

**J:** How does your guest mix influence decisions around F&B sustainability?

**F&B:** During the week, most guests are corporate clients who focus on efficiency and are less interested in sustainability narratives. Their daily routine is centred around meetings and quick meal breaks. On weekends, city-break leisure guests tend to value higher product quality and may be more receptive to local products. However, budget constraints still limit the extent to which premium sustainable products can be implemented.

**N:** Do you have data on your monthly waste generation?

**F&B:** Yes. In October 2025, total waste amounted to 5,320 kilograms, comprising:

- Glass: 1,980 kg
- Organic waste: 1,970 kg
- Paper/Cardboard: 730 kg
- Plastic: 640 kg

Our recycling rate is 52%, which is positive given our operational scale. This corresponds to approximately 120 grams of waste per guest per night.

**B:** Do you measure food waste specifically, for example plate waste or buffet leftovers?

**F&B:** Detailed measurement is difficult because most of our service follows a buffet format. In buffets, preparation waste, buffet surplus, and plate waste all enter the same waste stream. However, our current estimate is that around 7% of all food handled becomes food waste. Some of this food is reused in the staff canteen, which reduces the total amount of waste.

**J:** Do you track any additional sustainability KPIs?

**F&B:** Yes. Currently:

- 22% of all purchased products are classified as sustainable.
- 37% of suppliers are considered local.

Increasing these numbers is limited by corporate procurement structures, as many purchases are centralised within the larger hotel group.

**N:** You mentioned that buffets are common. How does the buffet model relate to sustainability and operations?

**F&B:** Buffets are essential due to labour efficiency. Serving a set menu for 50 guests requires about eight waiters, whereas a buffet requires around four. With labour shortages and high personnel costs, buffets remain the most viable operational format. This applies globally in large-scale resort operations, including all-inclusive hotels in regions such as the Caribbean.

Staff recruitment in this region is difficult, so these operational constraints make a full transition away from buffets unrealistic.

**B:** Do you purchase directly from small farmers, fishers, or other local producers?

**F&B:** To a limited extent. We source freshly squeezed and frozen orange juice from a small local producer, and we sometimes source citrus products locally. Many small suppliers lack the capacity required for a hotel of this scale. We source meat locally, though from larger enterprises. Local sourcing of fish is not feasible due to very high prices and inconsistent availability.

**J:** Could you give an example of these challenges?

**F&B:** If a menu includes sea bream, we need 200 consistent portions. Small local producers cannot guarantee this. In an à la carte restaurant, menus can be changed daily, if only 20 fish are available, the dish is removed. In large-scale resort operations, menus for groups are fixed, and such variability is not possible.

**N:** So large-scale hotels face structural limitations regarding local sourcing?

**F&B:** Yes. Local sourcing at scale is very difficult, mainly due to volume requirements, price differentials, and supply inconsistency. These factors limit reliance on small local producers in group-based hotel operations.

**Appendix 4:** Face-to-Face interview with Melissa Madeira from HR/ Training (MM) conducted on 18.11.2025 by Nora Profanter (N), Joana Frisch (J) and Benedetto Mayr (B)

**N:** First of all, thank you very much for taking the time to speak with us. We are doing our master's thesis on sustainability in hospitality with Discovery Hotel Management. We were given the opportunity to visit Dolce CampoReal, speak to different departments and better understand your practices. Bene is mainly focusing on sourcing and ingredients and is looking into different suppliers. I focus on environmental aspects and certifications, and Joana looks at social sustainability, which includes how staff are treated, what contracts they have, and how the hotel engages with the local community.

**MM:** That is fine. My English is not perfect, but I will try to explain everything as clearly as possible.

**N:** That is absolutely fine, thank you. Perhaps we can start with the onboarding process. When a new employee starts working here, what happens?

**MM:** Every time a new employee joins the company, we organise an onboarding session. If there is more than one new person, we gather them together in a room. In this session we explain how the company and the hotel work, how many people we have, what their terms and conditions are, and the norms, procedures, values and mission of the company. We also explain how to fill in the forms they need on a monthly basis and where they can find information if they have doubts. We use a simple rule: "what, for whom, and when," meaning they should always know what to do, for whom they do it, and when it needs to be done. During the onboarding we also talk about respect and non-discrimination. We explain that there is no discrimination between nationalities or between men and women. We give some guidance on parenthood topics as well, to make sure they know their rights and what support is available.

**B:** What kinds of contracts do you use here at Dolce CampoReal?

**MM:** In Portugal we work with several types of contracts. We have seasonal contracts, yearly contracts and management contracts. Management contracts can be for a year or for half a year. People under a management contract belong directly to the company, but the first six months are usually considered a probation period. During that time both sides can evaluate if the relationship works. If everything goes well, they continue with us under the same contract conditions. In addition to this, we also work with outsourcing companies. Through them we hire staff for specific periods or specific times of the day, for example in busy seasons or for events.

**J:** You mentioned the probation period for management contracts. So after half a year they are fully integrated?

**MM:** They are integrated from day one, but the first six months are the probation period. They already belong to the company, but this time is used to confirm that it works for both sides.

**N:** What kind of social benefits or support do you offer to employees?

**MM:** Employees who have been with the company for more than one year receive health insurance. Everyone who completes one year of service gets access to it, and they can add family members for a small extra fee. This year we also started a new project with an external company called Pulsu. It provides confidential support to employees in different areas of their personal life. For instance, there is support for nutrition, for legal issues, for psychological matters and some other topics. Employees can contact this company directly, and it is confidential. They can use up to eight hours per topic, so it gives them real personal support if they need it. In individual cases, when we see that someone is having particular difficulties or wants to take a management course, we sometimes support them financially. In such cases we might pay fifty percent of a course or similar, always depending on the specific situation.

**B:** Earlier you mentioned international recruitment. Could you talk a bit more about the partnership with Brazil?

**MM:** Yes. This year we had a partnership with a Brazilian institution that wanted to send people to Europe so that they could learn about hospitality and gain international experience. We received some people who worked in another hotel of the group and also here. They stayed for about half a year or less. It was a kind of experiment for both sides. Their communication and language skills were very good, and we were happy with them. We would have liked to keep them for longer, but at least one of them had other plans and decided to move on.

**J:** And what about accommodation for staff? Do you provide housing for employees who come from outside the region?

**MM:** Yes, we do. When we recruit, especially if people come from far away, one of the things we present as a benefit is the possibility to stay in our staff house. We have two townhouses with around eight beds each, so sixteen beds in total. Employees can live there. In addition, we provide food twenty-four hours a day in the staff canteen, so they always have access to meals.

**N:** Do you have any kind of bonus or incentive scheme?

**MM:** We do. Every year, depending on the performance of the hotel, we provide a prize or bonus. The exact value depends on several factors, including the financial results of the hotel, staff evaluations and feedback from managers. When the hotel performs well and an employee has been working with us for at least eight months without major behavioural problems or unjustified absences, that employee can receive a bonus that corresponds more or less to an extra monthly salary.

We also have a referral scheme. If an employee recommends someone to work with us and that person is hired and stays at least six months, then the employee who made the recommendation receives three hundred and fifty euros.

Besides that, we offer several small benefits. For example, at the beginning of the school year we give a back-to-school kit to employees' children, with notebooks and pens. When a baby is born, we give a baby kit to the parents. On Mother's Day and Father's Day we give small treats or gifts. Every month we celebrate staff birthdays with a cake and some sparkling wine. At Christmas we give each employee a voucher so they can experience our hotel or restaurant, and we organise a Christmas party, which is one of the highlights of the year. There is dinner, a show, games and a DJ, and almost everyone attends, apart from a few people who must stay on duty in the hotel.

**J:** How do you handle learning and development, especially the 40 hours of training that are mandatory in Portugal?

**MM:** By law we have to provide forty hours of training per year to each employee. For this we use an online platform called Academy. Each employee receives a login and can choose courses they want to complete. The challenge is that many people, especially those in operations, do not work with a computer on a daily basis and say they do not have time. To solve this, we sometimes gather groups of ten to fifteen people and schedule a training session during working hours. We also have tablets that employees can use to access the courses.

The Academy is mandatory, but in practice the difficulty is not the platform itself; it is finding time and motivating people. Many employees, particularly older ones, are less comfortable with technology and prefer face-to-face contact. Younger employees are usually more used to these online systems.

**N:** Do employees also receive training outside of the Academy?

**MM:** Yes. If a department head suggests an external course, or if an employee asks for it, we evaluate the request. When we approve it, we usually pay at least fifty percent of the cost. Sometimes that amount is later deducted from a bonus or spread over time; it depends on the agreement we make with the employee.

**B:** How do you communicate policies and information to the staff?

**MM:** The first moment is always admission and onboarding. We explain the key points personally. After that we use written communication. Near the canteen we have a notice board where we post all important information, so even staff who do not use email or have no laptop can see it.

We normally send documents and internal communication in Portuguese. Some materials also exist in English. It is quite easy nowadays to translate documents if someone does not understand everything. In a way, this also encourages people to become more familiar with Portuguese, even though it is not strictly mandatory to learn the language.

**J:** How many nationalities are represented in your staff?

**MM:** At least eight different nationalities are working here at the moment.

**N:** Working hours and overtime are critical aspects of social sustainability. How do you monitor working hours and avoid excessive overtime?

**MM:** It is a very difficult part of hotel management because the business is so dynamic. According to the law, people cannot work more than six days in a row. On the seventh day they must have a day off.

For some positions we use a clause called "isenção de horário," which means exemption from fixed working hours. When someone has this clause, they receive around twenty-five percent extra on their salary, and they can work up to two extra hours per day, with a maximum of forty extra hours per month and a maximum of one hundred and fifty extra hours per year.

If someone works on a day off, these hours are recorded and later compensated with time off. We insist that these hours must be taken, because otherwise they accumulate and become a liability. It is not easy, but we try to balance the needs of the operation with the need to respect people's rest.

**B:** When you have extra hours, do employees prefer to receive money or time off?

**MM:** The sector association requires us to conduct internal questionnaires. One of the questions asks whether staff prefer overtime to be paid in money or compensated with time. Every time we run this survey, around ninety-five percent of employees choose time instead of cash.

This result is quite impressive but also understandable. Some jobs, such as housekeeping, are physically demanding and not highly paid. People feel tired and value time with their families very highly.

**N:** Does this create operational challenges for you?

**MM:** Yes, of course. It means that we have to be very efficient in planning. We constantly remind the team that we are not only here to please guests; we are also running a business and have to be financially sustainable. If we are not careful with labour costs, the business will not perform well. At the same time, if we do not respect people's time, they will leave.

From my perspective, about ten to fifteen percent of employees really push the boundaries and go the extra mile. They are our key players. We cannot afford to lose them. Every year we look at their performance and try to adjust their salary or bonus to keep them motivated.

**J:** How do your salaries and benefits compare to the industry standards in Portugal?

**MM:** We are part of the hospitality employers' association, so we follow the collective labour agreement for the sector, which sets minimum wages per category. Our company always pays above the minimum. We do not pay only the absolute legal minimum salary.

In addition to base salary, staff receive a meal allowance of about one hundred euros net per month. In Portugal, employees usually receive fourteen salaries per year: twelve normal monthly salaries, plus a holiday pay and a Christmas bonus. In our company, there are also three extra days of holidays if the employee had no unjustified absences in the previous year. So, effectively, people work roughly ten and a half months and are paid the equivalent of fourteen or fifteen months.

If they work between midnight and seven in the morning, they receive an extra payment. If they work on public holidays, they accumulate hours that they can later use as time off.

**N:** Coming back to outsourcing, to what extent are outsourced staff integrated into your HR and sustainability practices?

**MM:** For outsourced staff we demand that the agency follows the law and that workers have proper contracts. That is our basic condition. When these staff arrive, they usually receive on-the-job onboarding. In housekeeping, for example, an experienced housekeeper goes with them to the rooms and shows them how to work according to our standards.

In F&B it is a bit more difficult because we usually ask for external staff when we are very busy and need help immediately. There is not always time for formal training. Still, we expect basic procedures to be followed, such as separating food waste from recyclables. They know that different kinds of waste go in different containers.

The main advantage of outsourcing is flexibility. The hourly cost is actually higher than for our own employees, but it allows us to adjust to peaks in demand. If someone from an outsourcing company works here for a long time and we want to hire them, we can do that by paying a fee to the agency, which is usually around three to four thousand euros.

**J:** How do you approach internal promotion and career development?

**MM:** Our principle is always to promote internally whenever possible. If a higher position becomes available, we first look inside the hotel or the group. Only if we cannot find anyone suitable internally do we look outside.

In my department, there are about twenty to twenty-two people, and almost all of them have been promoted internally at some stage. In F&B it is similar. We identify young people with potential, give them more responsibility and, over time, adjust salaries and bonuses. I try to stay close to them, to see their efforts, and to explain the business reasons behind decisions.

At DHM group level there is also a project for talent development. For example, one colleague was selected to visit several hotels in different locations, to learn different ways of working. Today she is the number two, or deputy general manager, in one of our hotels. DHM is still building and structuring this type of pathway, but it shows a clear intention to develop people internally. Of course, it always depends on personal factors such as family, willingness to relocate, and so on.

**N:** How does Discovery Hotel Management work with social sustainability at group level, especially in terms of culture, employee climate and community?

**MM:** Every year there is a big group event where the management of the eighteen hotels, including general managers, heads of department and one or two employees from each hotel, meet together. The CEO and sometimes the owner are also present. They share good practices, creative ideas and success stories.

We have an internal social-media-like platform where short interviews and stories about employees are posted. We encourage hotels to show what they are doing in terms of creativity and staff engagement.

Once a year, around April, every employee receives a climate survey. It is anonymous and asks about how they feel regarding the hotel and the group. This helps us understand where we need to improve.

This year we also had a budget to improve staff areas. That included things like renewing locker rooms, buying equipment or improving break spaces. The idea is to make the working environment more pleasant.

**B:** Are there any specific activities that connect the hotel to the local community in Torres Vedras?

**MM:** Yes, we do some things, even if we do not always communicate them widely. For instance, if a local association or the city hall needs a meeting room, we sometimes provide it.

The local authorities and firefighters are invited to events, especially when we have bigger functions.

Internally, we also try to create special moments for staff. During Housekeeping Week we organised a breakfast on the terrace for the housekeeping team. Another year we did a picnic on the golf course for them. The idea is to make them feel valued and to show that we appreciate their work.

**N:** Do you track staff turnover, and what are the main reasons why people leave?

**MM:** Our turnover rate is around eighteen percent. It is not ideal, but it is also not extremely high for this industry.

Some people leave because they no longer want to work weekends. Others have small children and no family support, so they need to stay at home. Some receive new offers in other hotels or start new projects. We also have cases of people who have been here for twenty years and are simply tired. In some cases we try to offer solutions, such as a one-month break to rest, but sometimes they still decide to move on.

Hospitality is a stressful industry, very exposed to guest criticism and online feedback. It is not as attractive as it once was, which makes recruitment and retention more difficult.

**N:** Is there anything else you would like to add regarding social sustainability, your staff or the community?

**MM:** I think we covered the most important points. For us it is always a balance between taking care of people and maintaining a healthy business. We try to offer benefits, recognition and development opportunities, while also keeping the hotel efficient and competitive.

**N:** Thank you very much for your time and for sharing all of this with us. It was very insightful and will help us a lot in our thesis.

**MM:** You are welcome. It was a pleasure.

**Appendix 5:** Face-to-Face interview with Executive Housekeeper Ediane Klipel (EK) conducted on 18.11.2025 by Nora Profanter (N), Joana Frisch (J) and Benedetto Mayr (B)

**J:** Thank you for meeting with us today. To start, each of us focuses on a different area: Ben on F&B, Nora on environmental topics, and I look at social sustainability. We would like to begin with questions regarding housekeeping. Our first question is: do you track the amount of waste generated by the housekeeping department, such as plastic or general waste?

**EK:** No, we do not track it. The purchasing department works with the suppliers, and they are the ones who manage the waste separation. Housekeeping collects the waste from the rooms, and then it is separated by the staff in the appropriate waste containers. We collect the waste but we do not separate it inside the room itself; separation happens afterwards.

**N:** So you use one plastic bag per room for general waste?

**EK:** Yes, exactly. One plastic bag per room.

**J:** And have you implemented any measures to reduce waste over the past years?

**EK:** Not really. Since COVID, we removed many printed materials from the rooms. For example, before the pandemic there were two sheets of information, now we only keep one. We also removed some items. Regarding amenities, we no longer use individual shampoo bottles or individual shower gel bottles inside the rooms.

**N:** We saw refillable dispensers in our room. Are all rooms equipped with refillable products?

**EK:** Yes, all rooms use refillable dispensers for shampoo, shower gel, and conditioner. The only individual amenities are placed outside in the houses, not in the hotel rooms.

**B:** And do guests still request individual bottles?

**EK:** Very rarely. If they request them, we provide them, but usually it is not asked.

**J:** We also noticed that you provide bathrobes and slippers. Are those provided automatically or only on request?

**EK:** They are only provided on request, except in some room categories where they are part of the standard setup. This helps reduce laundry demand and overall consumption.

**N:** Would you say laundry, linen and towels, is the highest environmental impact area within housekeeping?

**EK:** Yes, definitely. Washing linen and towels uses a lot of water, energy, and detergent. That is why we change the linens every three days. If a guest requests an earlier change, of course we do it, but the standard is every three days.

**B:** And regarding towels, do you also follow a towel-reuse policy?

**EK:** Yes. There is signage in every room explaining that if guests want to reuse their towels, they should hang them. If they want new towels, they should leave them on the floor or in the bathtub. If a towel is on the floor, housekeeping always changes it. This system has reduced consumption. I would estimate around 20% of guests participate, but I cannot give an exact number.

**N:** And for the pool or beach towels, do you place them in the room?

**EK:** No, guests must request them at the spa or pool area. They are not placed inside the rooms.

**J:** Was this change introduced after COVID?

**EK:** No, that practice existed already before COVID.

**N:** Do other hotels in the Discovery Hotel Management group have different sustainable practices in housekeeping, or do you all follow the same standards?

**EK:** As far as I know, we all follow similar procedures, but I do not know all details from other properties.

**N:** Regarding waste separation: how do you encourage guests to separate waste inside the room?

**EK:** Unfortunately, we cannot do that inside the room. Guests only have one bin. Housekeeping staff must separate it afterwards. We have to look through the bag and check for glass, because broken glass is dangerous for the staff.

**B:** Would providing separation bins in each room be an option for the future?

**EK:** We have considered it. However, it is expensive and also affects the visual appearance of the room. Having three bins instead of one is not aesthetically pleasing. Additionally, housekeeping would still need to check for broken glass, because that is the biggest danger—staff could cut themselves when emptying bins.

**J:** Earlier we heard that you once tried non-plastic bins or bags. Could you explain why those were discontinued?

**EK:** Yes, we tried paper-based solutions, but they were not practical. When the bags got wet, they broke easily. That caused stains and required more time for housekeeping. Because of that and the higher cost, we returned to plastic bags.

**N:** Are there any new sustainability initiatives planned for housekeeping this year?

**EK:** Not many changes. All cleaning products come from Ecocare (Ecolab). It is an international company, and all products are certified for sustainability. These products are used in nearly all hotels of the group. Every year, when we renew the Green Key certification, we have to ensure that all cleaning products meet the sustainability criteria.

**B:** And what about guest amenities, such as shampoos and soaps?

**EK:** Those come from a mandatory supplier approved by the group. For the refillable dispensers, the supplier is Portuguese.

**N:** We spoke to the Head of Maintenance and he mentioned some dose-controlled dispensers for detergents. Does housekeeping also use those?

**EK:** Yes, some of our cleaning systems use automatic dosing. It helps reduce product waste.

**J:** Do you outsource laundry?

**EK:** Yes. Outsourcing is necessary because running an in-house laundry requires a large team and high investment in machinery. The external laundry company has local operations, has the workforce and equipment, and provides both the washing and the linen itself. We pay per item. If something is damaged, they replace it.

**N:** Are there any major changes planned for amenities, for example switching suppliers?

**EK:** There was discussion about possibly changing the shampoo amenities in the future, but nothing is confirmed.

**J:** How long have you been here? Did you experience the period before Green Key certification?

**EK:** No, I arrived after the hotel was already implementing Green Key standards. So, I do not have a comparison.

**N:** Do you provide sustainability training for housekeeping staff?

**EK:** New employees receive instructions during onboarding. Additionally, every day we hold a 15-minute housekeeping briefing where we address different topics. Sometimes it is about sustainability, sometimes about procedures for room cleaning, time management, or other matters. Every two months, we repeat key topics.

**B:** That was very informative. Thank you very much for your time and all the explanations.

**EK:** You are welcome.

**Appendix 6:** Face-to-Face interview with Front Office Manager Nuno Caetano (FO) conducted on 18.11.2025 by Nora Profanter (N), Joana Frisch (J) and Benedetto Mayr (B)

**J:** Have you implemented any digital solutions in the front office to reduce paper use, for example for spa bookings or parental authorisations?

**FO:** Yes. Previously, everything was done on paper: spa treatments, appointments, and similar forms. Now almost everything is digital. We hardly use any paper at reception for these processes anymore.

**N:** You also have a paperless check-out process now, correct?

**FO:** Yes, we do. Invoices can be sent directly by email, and most guests, especially individual guests and companies, prefer that. Some guests still ask for a printed invoice, but it is less frequent. The only document that we really need to print consistently is the registration card that guests sign at check-in.

**B:** And why do you still need to print and keep those registration cards?

**FO:** They are a formal confirmation of the booking. They are signed by the guest, include the dates of stay and some details, and we are required to store them. It is a legal and procedural requirement. For instance, last week I received a complaint from American Express because a guest claimed not to know when we charged his card. In such cases, we must provide proof: the signed registration card, the confirmation of the reservation, and the payment slip from the terminal with the guest's signature. So, paper is still very important in certain situations.

**J:** Have you considered switching those signatures to tablets instead of paper?

**FO:** Yes, we have already thought about that. It would require a tablet solution where guests sign electronically. Even if we used just one tablet at reception, it would still be an investment. So far, we have not implemented it. We did, however, invest in machines that scan identity cards and passports directly into the system, which replaced paper copies we used to take in the past.

**N:** In terms of sustainability performance, do you communicate any results or indicators to guests?

**FO:** Not at the moment, at least not directly. We mainly communicate those results internally, to the team. Through the Green Key programme we have access to a carbon footprint report and other indicators that we have to submit to the Green Key application. We normally share this information on a board in the staff area downstairs so employees can see it.

**N:** And why do you not share this information with guests as well?

**FO:** There is no specific reason; it simply has not been done yet. You are right that some hotels use these results to promote how sustainable they are. It is actually a good idea. We have large TV screens at reception, so we could use those to display key figures or messages. It is something I can seriously consider.

**J:** So, currently you mainly track and communicate sustainability results to maintain the Green Key certification?

**FO:** Yes, Green Key is very important. If you lose the certification, you lose it for the whole year, even if you try to reapply. That would not look good from a reputation perspective. We have many international groups that choose this hotel specifically because we have a green certification. In that sense, it is a strong factor for attracting certain clients, especially since many golf resorts do not yet have such certifications.

**B:** In the DHM report, it is mentioned that you started to phase out disposable plastics and introduced biodegradable alternatives. Could you explain what those alternatives are from the front office perspective?

**FO:** At front office, the main change is related to water packaging. We now have glass bottles and Tetra Pak water instead of the classic plastic bottles. Tetra Pak is more expensive, for example, one Tetra Pak costs significantly more than a plastic bottle that might be 19 cents but it is a better option overall. One practical issue is that people often take many plastic bottles in their backpacks, especially golfers or guests going out for the day. Using glass or Tetra Pak reduces that behaviour and the plastic waste.

**N:** Are there other small changes you have made at front office to reduce paper or disposable materials?

**FO:** Yes. For invoices, we always ask the guest whether they really need an envelope. Most say no. We also encourage sending invoices by email. As mentioned, we still need to keep the signed registration cards for legal reasons, but we try to minimise everything else. Many internal documents that used to be printed such as taxi schedules or restaurant information are now available online.

**J:** How have you configured printing in the front office to support sustainability?

**FO:** All printers are set to black-and-white by default. This saves both ink and costs. Only specific users are allowed to change printing settings if necessary. Everything is carefully studied so we can save as much as possible. When we need to print internal documents, we usually use recycled paper, for example, sheets that have already been printed on one side.

**N:** Is the front office staff trained to talk about sustainability with guests?

**FO:** There is some training, yes, though it is not constant. Through the Green Key application, there are training modules and campaigns available. We also have an internal e-learning academy. Some content there is related to sustainability. I always encourage the team to complete these trainings because it is good for them to understand what we are doing.

**B:** Are those trainings mandatory for the team?

**FO:** The mandatory element is the general 40 hours of training per year. The Green Key modules and specific sustainability trainings are more like an additional resource. The e-learning academy offers a class related to sustainability as an extra, but it is not compulsory for everyone.

**N:** As head of the front office department, what challenges do you see regarding social sustainability, such as employee well-being and staff satisfaction?

**FO:** We try to create awareness and good habits in everyday situations. In the canteen, next to the napkins, there is a sign asking staff to take only one. In the bathrooms, we have information about hot water usage and reminders to avoid wasting it. The taps are positioned so that when they are first opened, they run cold water rather than hot. We also have flyers about paper reduction. At the front desk, when we need to print something internal, we use recycled paper. All the schedules for taxis and food and beverage outlets are online now. The only document we still print daily is our checklist, because we need to write on it, but even that is printed on reused paper.

**J:** Are your employees generally satisfied with their work situation? Do staff questionnaires indicate areas to improve?

**FO:** Overall, they are satisfied. In the questionnaires, the main demands are always similar: more days off and higher salaries. That is quite normal in hospitality. Apart from that, there are no major recurring complaints.

**N:** Is your team involved in any community initiatives in the local area?

**FO:** Yes. One of my colleagues supports elderly people. We also organised an initiative around two years ago in Lisbon, where we collected food and delivered it to homeless people. Such activities are usually appreciated by the staff. At the front desk, we are "people persons", so we enjoy that social contact and helping others.

**B:** Do employees themselves request such activities?

**FO:** Yes, sometimes they do. Then it depends on time and organisation, but whenever possible we arrange them. They like to participate.

**J:** Is there any kind of sustainable staff transportation solution for getting from home to the hotel?

**FO:** Not really, not yet. The van you used today is primarily for guests staying in the villas outside the main building. We also have two staff houses, and when it is raining, we use the van to transport staff between the houses and the hotel. There is talk about replacing the van with an electric one in the future, but for now it is mainly used for short transfers on the property.

**N:** What kind of training and development opportunities do employees have beyond the mandatory hours?

**FO:** Apart from the mandatory 40 hours and the e-learning academy, we organise cross-trainings. For example, we have cross-training with the reservations team, which works closely with us as a kind of back office. I also like to send front office staff to spend time with housekeeping so they can see the work and difficulties of that department. It is important that different departments understand each other's reality. It creates awareness and improves collaboration.

**B:** Do you see possibilities for career progression within your department or across departments?

**FO:** Yes, definitely. We always look internally for people with potential. Every time we have a good bellboy who shows interest and willingness to go the extra mile, it becomes easy to integrate him into the front desk. Right now, we have one very promising bellboy, but he is still part-time because he is finishing school. We encourage staff to move within the hotel and grow.

**J:** Is staff turnover a concern in your department?

**FO:** Not really. Turnover is low. I have one person leaving next month, but I already have someone lined up. Earlier this year, an employee left and then asked to come back. I often tell people: "You are happy here, but you do not realise it." Sometimes they need to go elsewhere to see the difference and then they return. Overall, the environment is good.

**N:** Do you have a preference for hiring local staff?

**FO:** Yes, I usually prefer candidates who live in the area. It is easier in terms of transportation and flexibility. For example, in afternoon shifts, if people live close to each other, they sometimes come together and carpool. That is positive both socially and environmentally.

**B:** How do you handle benefits and performance-based rewards for your team?

**FO:** Every year we try to give benefits to employees, and these are linked to performance. If someone performs better than last year or better than internal peers, that has an impact on the bonus at the end of the year. Everyone who has worked with us for more than eight months is eligible. The final bonus is based on a mix of the individual performance evaluation, feedback, and the overall hotel performance. As I mentioned, we always look internally for potential. When we see someone with the right attitude and ambition, we try to support their progression within the team.

**N:** Do you personally participate in selecting which employees receive a bonus?

**FO:** Yes. I am involved in that process together with management. We review evaluations, feedback and results, and then decide. It is important that bonuses reflect both effort and potential.

**B:** That covers all our questions from the front office perspective. Thank you very much for your time and for sharing these insights.

**FO:** Thank you. It was a pleasure.

**Appendix 7:** Face-to-Face interview with Head of Maintenance Héllio Bexiga (HB) conducted on 19.11.2025 by Nora Profanter (N), Joana Frisch (J) and Benedetto Mayr (B)

**N:** We are students from Nova SBE studying Management with a specialisation in Hospitality. For our thesis, we are researching sustainability in the hospitality industry. We collaborate with an organisation similar to the Sustainable Restaurant Association, which provides sustainability certifications to hotels and restaurants. Their full framework is more than 200 pages, which can be overwhelming for properties, so we created a lighter version that we are testing here at Dolce CampoReal. We would like to ask you a few questions about maintenance and energy management. Is that okay?

**HB:** Yes, that is fine.

N: The first question is whether you currently monitor your energy consumption and, if yes, how.

**HB:** Yes, we monitor it. We are also changing the lights to ecological LED lights. We will change all the lights. I do not know exactly how much we save with that, but it will be much less. Before the lights consumed around 50 watts and the new ones use two, three, or four watts. So, it is a big reduction.

**J:** And do you monitor consumption monthly?

**HB:** Yes, we have monthly monitoring, but I cannot tell you the numbers. It is not so important for me to know the exact figures. We check it in the times when we have to make the reports.

**B:** Yesterday, the General Manager told us that the energy consumption here is quite high, especially for a resort of this size.

**HB:** It depends on the hotel's occupation. But yes, some things are outdated, which is why we are changing the lights now. It is a slow process. In the final year, I can tell you how much we saved, but for now I cannot calculate it.

**N:** Is it mandatory for you to track this information, or is it only for internal use?

**HB:** It is for internal use. We know we spend less because we change from 50 watts to 5 watts. We also have programmed times so that the lights go off at night. Almost all lights turn off at midnight because at night we only need a few lights for simulation.

**J:** And regarding Green Key: are there specific requirements for maintenance that you need to implement this year or in the next years?

**HB:** I do not know. I think no.

**N:** We already spoke with Pedro, and he also mentioned that you know about the certification process.

**HB:** Yes, I know. But for maintenance, there is not something special that we have to follow.

**B:** Do you already use any renewable energy sources, such as solar or biomass?

**HB:** No, not yet. It is a big investment. But we already have a project. It is solar panels for the parking area, like a cover over the cars with panels on top. We have a budget for that. It is for the future, not done yet. With that, we expect to reduce some costs, yes.

**N:** Do you have a water-efficiency plan, including things like timer taps or flow restrictors?

**HB:** Yes. In the showers we have reducers. For example, the intensity of the water is reduced to around three litres for four minutes. We also reduced the water used in the flush systems. Before it was maybe ten litres, and now it is around four or five litres.

**J:** And the lakes on the property: do they support any water reuse systems?

**HB:** The small lakes are only for the golf course. It is separate. It is not used for the flush system.

**N:** Do you use any specific pool-management measures, especially because heating the pool consumes a lot of energy?

**HB:** The pools are heated all year. We have two pools. The system is not very big. The resistance is small, so it does not consume as much as a large system.

**B:** Do you record or estimate your annual $CO_2$ emissions?

**HB:** No. But we have an ASAE system. That controls the hotel and checks our consumption. It is for all the entities, not only this hotel.

**N:** Have you noticed any changes or limitations introduced by the Green Key certification, especially concerning energy?

**HB:** I cannot say. But it is important to reduce consumption, yes.

**J:** Is it possible for us to see some of the documents related to energy monitoring?

**HB:** I think yes.

**B:** Do you implement any measures to reduce energy consumption in the winter?

**HB:** Yes. In the other areas, like the townhouses, we close the pool in the winter because nobody goes swimming. So, we reduce consumption for the pool and also for the products.

**N:** And you do not manage waste, right? Waste is not part of your department.

**HB:** No, waste is not mine. Only maintenance.

**B:** Then we have covered everything. Thank you so much for your time.

**HB:** You are welcome.

**J:** Thank you very much.

**N:** Yes, thank you so much for taking the time.

**HB:** Thank you. It was good. And do not worry about the Portuguese, it was perfect.

**Appendix 8:** Face-to-Face interview with Head of Procurement Ricardo Ferreira (RF) conducted on 19.11.2025 by Nora Profanter (N), Joana Frisch (J) and Benedetto Mayr (B)

**B:** Thank you for taking the time to speak with us. As you know, we are three hospitality management students from NOVA, currently writing our thesis in collaboration with the Sustainable Restaurant Association. They work with the "Food Made Good" certification, and we are developing a lighter, more accessible model, an FMG-Light version, for hotels to begin their sustainability journey. Dolce invited us to conduct fieldwork here, and we have already spoken to most operational departments. We now have some procurement-related questions.

**RF:** Perfect. I have the general context, although I did not have the chance to read everything in detail. Feel free to continue.

**B:** In the DHM Sustainability Report 2024 it is mentioned that a supplier code of conduct will be implemented in 2025. Have you already received such a code from DHM?

**RF:** No. At the moment I have not received anything, and honestly I was not aware of it. There is a lot happening simultaneously in DHM and some things get lost in communication.

**J:** How do you personally define "local"? Is it distance-based, region-based, or dependent on product category?

**RF:** It depends on the product. For wines, local is defined regionally. For honey or pastry, local usually means within the Torres Vedras area. In general, around 50 kilometers is considered local, with a lower carbon footprint.

**N:** Do all departments channel their purchasing through you? For example, kitchen, housekeeping, spa?

**RF:** More and more, yes. The idea is that all procurement flows through my department. Before, departments purchased independently, but now final confirmations always come through me.

**B:** Do you currently purchase directly from small-scale local farmers, fishers or producers?

**RF:** We always did, but on a small scale due to budget constraints and the quantities local suppliers can provide. It also depends on the GM's and F&B Director's vision regarding what they want to showcase. A few years ago, we had a very strong policy prioritising local suppliers: about 80% of our wines were local, and we used local honey, fresh cheese, pastries and other products. Many of our in-room amenities are still locally produced just four or five kilometres from here. But ultimately, these decisions depend on top management, not on procurement alone.

**J:** So the motivation to source locally comes more from personal interest than from mandatory requirements?

**RF:** Exactly. There is no direct requirement from DHM or Dolce. It is mostly personal motivation within the team to work with local producers.

**N:** Do you maintain a documented supplier list with sustainability criteria?

**RF:** Not with sustainability criteria. We do maintain lists for compliance with Green Key, but these focus more on local, organic, and chemical-related criteria, especially cleaning products.

**B:** Does Green Key provide mandatory sourcing KPIs?

**RF:** Yes. We need to provide evidence for several criteria for renewal, such as proof of local suppliers, organic products, and sustainable cleaning product ranges.

**N:** Apart from sourcing, what sustainability-related responsibilities fall under your role?

**RF:** Many. For example, we collect and store used corks. Nespresso picks up coffee capsule waste monthly. Used pallets are collected monthly by large suppliers. We must weigh our waste as part of Green Key. Every month, we record the hotel's total waste, guests, and occupation and upload it to a shared spreadsheet. Used cooking oil is collected monthly by an external company. This was already in place before Green Key; I have been developing these routines since I started in 2007.

**J:** Have you observed waste reduction over time?

**RF:** It is very difficult. Waste is directly related to occupancy. Also, the entire industry increasingly relies on single-use packaging due to HACCP requirements. For example, frozen food now arrives in multiple layers of cardboard and plastic. This has increased dramatically since I started. So reductions are hard to achieve, even though we have changed many things: glass instead of plastic, bamboo or paper instead of plastic cutlery, and similar steps.

**B:** Do you believe weighing waste is beneficial?

**RF:** It raises awareness, but does not create major change by itself. I did it even before it was mandatory, because I believe awareness influences behaviour. But if someone new and less motivated took over my job, having clear guidelines would help them understand what to do and why.

**J:** In your opinion, which type of waste is the highest?

**RF:** Food waste, unfortunately. Though we reuse what we can in the canteen and the kitchen uses whole products, our chef insists on buying whole chickens so all parts can be used. But packaging waste from suppliers is enormous.

**N:** Given this challenge, which systemic factors make waste reduction difficult?

**RF:** The client profile and price sensitivity. For higher-end clients, sustainability can be integrated more easily because they accept higher prices. Here, clients are different. Also, golf fundamentally contradicts sustainability. Grass maintenance destroys biodiversity and requires enormous water and chemical use. So the hotel tries, but is surrounded by something not sustainable at all.

**B:** What is your perspective on Green Key as a certification?

**RF:** It is useful, because it forces you to do something and improve every year. They add new criteria constantly, so you evolve.

**J:** For small hotels starting their sustainability journey, do you think a light, accessible framework like FMG-Light could help instead of immediately adopting a full certification?

**RF:** It depends on management. If management wants to change culture, a lighter framework could help raise awareness. If they want immediate compliance, certifications might be chosen. It all depends on strategic intention.

**N:** Do you believe Dolce could become a greener, more local-focused hotel over time?

**RF:** I strongly believe it should. I have argued for this for years. We used to be much further from sustainability but have made improvements. However, this building dates from 2007 and much must change structurally. I would love to have solar panels, but that requires owner investment. DHM is owned by an investment fund whose goal is profit, not sustainability investments. Octant has more flexibility because it is being positioned as a brand. Dolce is an events-driven brand, so different priorities apply.

**B:** You mentioned you are developing a database and sharing it with other DHM hotels. Could you explain?

**RF:** Yes. Since my colleague joined, we have begun building structured databases: technical sheets, supplier documents, organic product lists, contract information, etc. We have a procurement WhatsApp group with other DHM hotels. We share policies, supplier contacts, procedures for Green Key, and best practices. It is still in early stages, but it is effective and helps everyone.

**N:** From your experience, what prevents Dolce or DHM from adopting deeper sustainability frameworks?

**RF:** Mainly economics. Also logistics: many modern hotels are built with almost no storage space. That means suppliers must deliver many more times per year, dramatically increasing carbon footprint. In older hotels, stocking for weeks was possible; now daily deliveries are normal. This alone creates huge emissions. Without storage, sustainability becomes structurally limited.

**B:** Thank you. Do you have any documents you could share with us, such as waste tracking spreadsheets or supplier lists?

**RF:** Yes. Send me your email and I can share what is possible. The supplier network is large, but I can extract a report with the suppliers relevant to our unit. Most contracts are for services rather than products. For products, we avoid contracts because consumption varies unpredictably. We negotiate past performance rather than future commitments.

**N:** That would be extremely helpful for our thesis.

**RF:** Perfect. I will look into the documents and share them with you.

**B:** Thank you so much for your time and insights. They were incredibly valuable.

**RF:** You are very welcome. Happy to help. Let me know if you need anything else.

**Appendix 9:** Face-to-Face interview with General Manager Pedro Magalhães (GM) conducted on 19.11.2025 by Nora Profanter (N), Joana Frisch (J) and Benedetto Mayr (B)

**B:** OK, so based on the interviews we have had yesterday and today, we used this time to refine the kind of questions we would ask if we developed an entry-level sustainability certification. Right now, we would like to hear your thoughts on such an entry-level sustainability framework. The idea is similar to having a sustainability framework where you start at an entry level and then you have to progress. The one we are working with, Food Made Good, is not really structured as a pathway: you either have the full FMG certification or you do not. We are trying to implement a pathway towards the full FMG within the three pillars of sourcing, environment, and society. It is meant for hotels that have not yet thought very deeply about sustainability in their business. It should provide a first touchpoint with sustainability, because FMG can be quite overwhelming for management. So the idea is to include very concrete things where hoteliers might think, "Oh, I actually never thought about that," for example, specific aspects of waste or procurement. It is not that you go directly from this entry step to full FMG, but it is a touchpoint that gets people to think, reflect, and educate themselves more about the topic. It is really just to provide a starting point. So one first question would be: how many questions can a hotel realistically manage in a first stage without feeling overwhelmed?

**GM:** It depends on the tasks. It really depends on the tasks. But I think we are on a good track. I know that we can do more and that we must do more because this is already a very present theme. But if you think about a hotel that is not at your level yet – you are already operating at a relatively high level – I believe that even what this first entry framework will offer might be less useful for you than for hotels that are not so educated on this topic yet.

**J:** How many questions would you say are realistic? Because we had the idea that, under the three FMG pillars – sourcing, environment, and society – and the underlying sub-categories, we could have maybe two to three questions per sub-category, which would give us around ten questions in total for Stage 1.

**GM:** I would say between 20 and 30 questions. Because 10 or 20, in my opinion, is too short. With 30 questions, the person needs to invest some time, but it is still manageable. It is the beginning of a process. So I think 30 questions is a good entry step.

**N:** Which types of sustainability data are, in your experience, easy to collect in practice, and which are almost impossible to collect without major changes in systems or processes?

**GM:** Good question. The easiest ones are the "common-sense" measures that can be very specifically and easily integrated into daily routines. Things like printing in black and white instead of colour, or sending invoices by email instead of printing them. These are very small gestures that can be implemented and which are just common sense. Of course, it also depends on the interest of the person. If the person is willing to go the extra mile, then more can be done. Let me give you an example. We recently had a DHM event here. All the hotels were coming, all the general managers were coming, and people from the head office quality team were also coming. So a lot of people were going to look at us. I said to my team, "Look, let's stop our routine for a moment. Let's step back a little, and focus on what we need to improve before we start welcoming this group." We used that time to attack many issues, many situations that we do not normally address on a day-to-day basis because we are always running straight ahead. I said, "Take one step back. Let's look at what we need to correct, what is wrong, what we want, what we are doing wrong, and what we could improve. How could we take a different path?"

**GM:** That helped us a lot. Sometimes you need to stop for a while and take that helicopter view: leave the ground, go up, look around, see what you need to correct and what you should improve. That helped us to deliver a great event for DHM. The event was amazing, and everyone said it was great. After that, I said, “From now on, every three or four months, we will do this again.” We will stop for two to five hours with the head-of-department team and discuss what we need to correct, what we should improve, and what we can do differently. So it depends – you have to find time, bring people together, and put the topic on the table. But there must be one person leading the process. If you do not have one person leading and pushing, people will not feel the difference, they will not feel the benefits for the business or understand the need, and then they will not invest energy in it. If you have one person with that focus – and ideally with a personal interest in sustainability – it makes a big difference. If someone is privately not interested at all, it is very hard to get voluntary initiative and extra effort.

**GM:** The heads of department are the ones who have to think beyond the basics. I do not accept only the regular performance – that is the minimum, the Olympic minimum. I expect them to do more. I want them to surprise me, be creative, and add value to the company, to the staff, to the hotel, to our business, to our guest feedback. We need that empowerment. I give a lot of autonomy so that people can create and also make mistakes – but then we learn from them and correct. For example, this year the Green Key process was very tough. But I said, “No regrets.” I assigned the mission to Nuno. I told him, “If you have difficulties, you speak with me. But I want you to put some of your own effort into this because it is important. We cannot lose it, and the team has to feel that it is very important. Push, and if you need me to intervene, let me know.” And everyone helped. So it was good.

**B:** Imagine that an FMG-Light already existed as a staged version. What would you need for you to adopt it in addition to Green Key? Which added value would it need to provide so that you would say, “OK, we already have Green Key, but this certification and its pathway would convince me to make the extra effort and implement it as well”?

**GM:** It would not need much, honestly, if it is something that adds value to us and helps us to get better, to improve processes, to help the environment, or to show goodwill and interest in the well-being of people, the world, and the community. I think it will somehow give us something back. It would give us an additional stamp, another certification that shows people we are putting effort into dealing with one of the main issues in the world today. So it would not need to be much. The most difficult part is to find the time to implement it. We have a lot of pressure: we are open 365 days a year, 24 hours a day. Our staffing levels are not exactly what we would like – we would need more people. That is not only because recruitment is difficult, but also because the administration wants us to be as efficient as possible. So finding time for this is crucial.

**N:** If we talk about time, in which ways should such a framework be simplified to make it more appealing for an SME-type hotel? Is it about less documentation, more straightforward questions, simpler language, or something else? Should the framework already provide recommendations?

**GM:** Yes, of course. It is good to include recommendations. People can be a bit lazy, but it will always help. Because people may not see the whole picture, and if you can provide that kind of information, I am sure it helps. With Green Key, when they ask us for examples, we have to go after them, we have to find evidence, check if we are doing things correctly. That is good in principle, but it takes time. Sometimes we had problems with Green Key because suppliers did not provide all the necessary information on the labels of chemical products. Perhaps one single product in a range did not comply, and then it was not accepted. So sometimes it is a back-and-forth process that takes time. But overall, I think it helps.

**J:** Do you think that guidance from a person at SRA, for example, would also help – in a similar way to how Green Key comes here for audits?

**GM:** Green Key always comes here and does an audit. They come, they take pictures of everything, after we provide permission, of course. They tell us when they are coming. That kind of guidance helps. So yes, having guidance along the way would be helpful. For example, having stages, or a person that could assist us, to whom we could send photos or documents and ask, “Is this the right documentation?” That improves communication and helps a lot. Sometimes Nuno, who is our front office manager, told me, “I don’t know anything about this.” And I said, “It’s OK, let’s go for it. Let me know if I need to sign something or if I need to facilitate something.” Because it is a task, and I am happy that by the end of the year he will have learned a lot from this and will understand another perspective, beyond front office. We need to put some pressure on the team to make them learn more, to create that eagerness to go the extra mile, not only in their own tasks but with a broader view of the whole hotel, not just their department. That is important to communicate.

**B:** We heard during the interviews that some sustainability performance indicators depend on external actors, like the waste management contracts, wine suppliers, or DHM. How should something like FMG-Light handle those different stakeholders that you as a hotel have to deal with?

**GM:** It is not easy to deal with these three types of parties, but you need to find the right source. With Green Key, for instance, this was one of the topics we needed to correct and find a way through. DHM has a person in charge of this process at corporate level, and they gave us some guidance. In addition, we have two or three friends working in other hotels within this project who are more specifically in charge of sustainability. Their work is really connected to this topic, so they could give us some guidance. That helped us. But it is still difficult to collect and bring all that information together in one place.

**N:** Looking at DHM more generally, do they have a preferred sustainability certification that they recommend to the hotels?

**GM:** I would not say they have a single recommendation, but for next year DHM has a goal that every hotel must have a Green Key certification. Every hotel will have to have Green Key. In addition, in Octant Hotels, which is the luxury brand within DHM, all of them have Leading Quality (LQA) or similar external quality audits, and they put a lot of effort into that. The minimum score expected is about 80 to 90%, so you can see that they put a lot of pressure on this. There are many requirements regarding the building and operations, similar to external audits from Egencia or others – very high standards, 80–90% as a minimum.

**GM:** For us, the challenge with FMG or SRA is that they do not want to "dilute" their framework. But we still need to see how we could adapt it to them and to the SME-type hotel reality. And again, with Green Key, you have to pay for it depending on the number of rooms. We pay, I think, around 800 euros per year, depending on room numbers. FMG is, I believe, between 500 and 1,000 euros per year as well. So there is a cost. Sometimes there is a reputational benefit that is not always directly visible. Some people look at certifications, some people only look at costs. Not so many hotels and restaurants yet have FMG. There are some people who specifically choose restaurants with such labels on purpose, because they see that even small operations are making an effort. But if you ask me, out of 10 guests, how many look at this? Maybe one in ten. But it is the future.

**GM:** Every time we manage to create more relationships around this topic, we become better known and we are on the right path. We are doing the right thing. It is common sense that we have to move in this direction.

**J:** One final reflection question. If you were in our position and had to design this idea of an "entry-level sustainability tool" for SRA and FMG, what would be the three non-negotiable features it absolutely must have?

**GM:** Savings. Cost savings. What you can do with this tool that will allow us to save a lot – in terms of energy, in terms of natural resources – and that will also help our business. That is non-negotiable. We do not need to have a full farm, but we need the beginning of something. For example, we created a small vegetable and herb garden, and I asked five to ten of the golf gardeners to help us. The chefs can go outside, cut herbs, and use them for the guests. It becomes part of the storytelling. It motivates people. But if you ask the top priorities of my team, maybe they would not put it in the top three, because it is not our "core" business – yet nowadays it is really important. So cost-effective savings are key: if you start by showing measures that in the short to medium term will save money and reduce costs, that is a strong step.

**GM:** The second feature is taking care of the planet. Ten or twenty years ago this was not a central topic, but now it is visible in every news channel – climate events, disasters, the damage we are doing to the planet. As a hotel, as a brand, as part of a group, we must care for the local community, help the surroundings, and support regional development. This creates a win-win situation. Everything takes time and energy, but sustainability will gain more and more importance year after year.

**GM:** The third point is that it must come with at least some investment possibilities. For instance, I know I could save more, but I need investments. Especially in the kitchen, we have several pieces of equipment that are not the most up-to-date and they consume a lot of energy. Our chiller is 15 years old, so it is not the most efficient system in the world, and it runs 24 hours a day for nine months in a row. In terms of energy – electricity, gas, and water – do you know how much I spend per year? Give me a number.

**B:** I only saw your expenditure for October, which was already insane just for energy, so I have no clue for the full year.

**GM:** About 600,000 euros per year, just for energy. It is a lot. And we have a 55–60% average hotel occupancy rate. On the P&L sheet, energy is around 7% of my total revenue. That is a lot. It would be very useful to reduce that if the budget allowed investment in more efficient equipment. The administration is aware. A new chiller would cost around 250,000 euros and would run at 70–80% efficiency. So if we could save a portion of that 600,000 euros, it would be worth it. Investment is needed, but we could do more.

**GM:** In terms of waste, I think the staff are increasingly sensitive to food waste, especially the breakfast cooks. If you go to breakfast at 10:15 in the morning, you will not see the buffet completely full anymore. We do not replace everything close to closing time, only if guests ask. We try to correct small things to prevent waste. For example, with kiwi at breakfast, we cut it in half and leave the skin on. If we peeled it completely, people would eat a lot more and a lot might be wasted. With the skin, people choose only what they really want. We have many such small "logical" tricks. Another one is to offer smaller plates at the buffet – that helps reduce waste as well. That is why I enjoy hotels and this position: there are always ways to find solutions to save money and resources. But it is very demanding, especially because everything is becoming more expensive. Everything we buy for one room, we have to buy for 150 rooms. There is a lot of damage and wear. Some guests do not respect things; sometimes even staff are not as careful as they should be. The damage can be massive. We have many stories. If there were a TripAdvisor for guests, it would be full – but in the other direction. You cannot imagine; I have seen everything. It never gets boring.

**N:** You can really feel that you have a very good team spirit and atmosphere here. It is very impressive.

**GM:** Thank you. But I always rely on my team. Always. I am not the kind of person who just instructs, "You have to do this." I try to facilitate my team's work. I give them the space they need and the support they need, but I want results and success. Overall, I am very happy with my team.

**B:** We also wanted to say thank you.

**GM:** Thank you very much. It was my pleasure. Really. It was amazing to have you here. You were very easy-going. It was interesting for the team as well, especially because you are studying hospitality and looking at our hotel in detail. That gave me the strength and the motivation to help you. If it were the other way around, I would also like to be welcomed like this. I hope to see you again, for leisure next time. You have my card; I can arrange special discounts and so on. Please feel free to contact me whenever you want; I will be glad to welcome you back.

**B:** Thank you so much. Just one last thing regarding documents: we sent you an email with what we need from each department. If you can get it, that would be amazing, but please do not worry too much if something is not available.

**GM:** Yes, I saw the email you sent before. Only Ediane has already given me the information for expenditures, electricity, and those things.

**B:** Yesterday, Hugo told us some numbers about food waste – that per guest they waste around 7%. It would be interesting to know where he has those numbers from, if there is a report or something like that.

**GM:** I think that normally this comes from DHM. We provide the information to DHM. I believe he collects data when we collect the waste – we weigh the waste. That is probably where the 7% comes from. I do not know the exact source of that specific number, but I did not ask him either.

**GM:** So, did you have fun? Were you well taken care of?

**J:** Yes, definitely.

**N:** And the accommodation was very good as well.

**GM:** I am glad to hear that. Thank you very much.

**B:** Around the middle of December, we will send you our final thesis if it is already finished. We are supposed to finish in December, and then in about one month from now we really have to do the work. Once everything is done, we will send it to you.

**GM:** Meanwhile, if you need anything from us, please let us know. We will try to help you.

**B:** Thank you so much.

**Appendix 10:** Online interview with SRA Patrick Hanna (PH) conducted on 25.11.2025 by Nora Profanter (N), Joana Frisch (J) and Benedetto Mayr (B)

**PH:** Hello, good afternoon.

**J:** Hi Patrick, how are you?

**PH:** How are you going everybody? Nice to see you.

**B**: All good, thank you.

**N:** How have you been?

**PH:** Busy out here. Busy, yeah. Quite busy. How are you? How are you doing?

**J:** Very good. Similarly, very busy. There's been a lot. The Heat Lancer came out last month, so there's been a lot of interesting reports to write, etc. But I've had one ear on how you guys are going on in the background, so I'm interested to be caught up to date. Can't wait to hear.

**N:** Alright, so maybe we can give you a little update. We have prepared the literature review for our master thesis and afterwards we thought about a concept for the methodology and we came up with three main options. One is the documentation inside, so we will receive some documents from Dolce CampoReal that will support the interviews that we had.

**J:** We had 10 interviews: two with the General Manager, others with the Head of Housekeeping, Director of F&B, HR Manager, so a very diverse group of people, mainly the heads of departments. We conducted those interviews last week during a two-day field visit at the hotel. There we could also do some observations. So we took pictures, observed staff or guests. Those three combined will be our methodology.

**B:** We went to the hotel with a draft of the FMG Light based on GRI criteria, EMAS criteria and several others to have a good overview of the industry and what criteria are important. We would like to double check with you what you think of our draft and how we can refine it. We will adjust it based on the interviews. This is not the final one, but we wanted to have you as an interview partner as well to make sure that we adapt it according to SRA needs or to your suggestions.

**PH:** Seems good.

**N:** So maybe Bene can share his screen if it's possible and then we can have a look through it.

**PH:** When you say you asked for documents from them, was this sort of evidence for it? So that would have been like photographs of equipment or examples of…

**J:** Documents would rather be HR policies or any documents that, for my side, I'm doing the society part, that would be any documents that they give to the employees to inform them about any novelties in the hotel. Or it could also be the energy consumption report, for example.

**B:** Do you see my screen?

**PH:** I do. It's super small. I'm super old, so if you could… Thank you. That's very big. That's alright.

**B:** So, as Joanna already mentioned, we tried to give your FMG full questionnaire, and then our work was to figure out which ones are the most important ones, which ones have low effort and high impact. We tried to base them not just solely on your questions. As Joanna mentioned, we looked at other European standards, and tried to identify academically which indicators we should use that align with the FMG but still allow the FMG logic. We tried to implement different stages, so that we can guide a first assessment, see at which stage the business is, and then show how they can progress towards the full FMG.

**N:** Here for Celebrate Provenance, we chose these four: Which products are sourced locally? How do you define local? Are menus planned seasonally? Do you promote Portuguese products? Then we defined stages: Stage 1 being occasional sourcing, Stage 2 regular sourcing, Stage 3 25–50% tracked sourcing. What is your first impression?

**PH:** Yeah, I was really interested to see how you got to this, and so this is exactly what I wanted to see. It's fantastic. It's really good, genuinely. Good on you. I'm interested to know how the client reacted when you were asking these questions. I suppose we'll go through that when we go through the interviews.

**J:** It was really hard for them to progress further because they already do Green Key, and Green Key requires progress in stages, if they don't progress, they lose it. And for them it was really hard because they rely on different stakeholders like DHM, the waste company, and even guests who plan far in advance. Feasibility was an issue in different areas.

**PH:** They had ownership that lay outside of their control. This is our biggest finding, right?

**J:** Yes. And the next was the budget for sustainability. The GM mentioned that hotels like Six Senses spend about 5% of their revenue on sustainability. They find it really hard to do anything without fixed budgets.

**PH:** I mean, this is something that we get a lot, "What is the business case for sustainability?" And I would say that's becoming more and more possible. But it's a difficult argument, yeah. I feel your pain.

**B:** Especially for my sourcing pillar. They wanted to source from local Portuguese fishers, but the problem was: for example, they had a big group coming, which was planned one year ago, and they agreed on a quantity of fish. And if you source local, it's usually smaller scale and availability can vary.

**PH:** And that's sometimes why direct sale is a difficult choice. Cooperative work is often easier. It's common. They may seem insurmountable today, but changes are coming—energy, availability, etc. Guests also have expectations. It's complicated.

**PH:** What I love you've done is that you identified early they might not be able to get straight into the FMG, and might not have understanding in all areas. This is a really nice median tool. It feels like something we could even learn from in the FMG. We expect people to have a level up here, but often clients don't yet have that understanding. This bridges and identifies strengths and weaknesses. It's doing a job we are supposed to learn from.

**J:** With Pietro, we first interviewed him with general questions, then on day two we went deeper into the FMG Light pathway. We asked how many questions he finds suitable for a first assessment. He said around 30. So we matched the important indicators without overloading them.

**PH:** With your light assessment, how did they do in the different areas?

**J:** We didn't do a real audit. It was more to see where our questions can be used. But we found that our perception of an old, stiff golf hotel was wrong, they already do a lot of sustainable practices. For example, they measure their food waste.

**N:** They keep bathrobes at reception so guests must ask for them, reducing unnecessary washing.

**PH:** Two questions: have you thought of collecting these anecdotal case study examples? We often spread best practices. And second, there is background noise, carry on.

**N:** They also use refillable shampoo containers, eco-labelled cleaning products and materials. We were surprised. But much of this is due to Green Key. This FMG Light is more for SMEs that do not have certifications yet. Stage 1 is awareness, Stage 2 integration, Stage 3 transformation.

**PH:** Have you weighted the scoring?

**B:** Yes. Sourcing has 40%, society and environment 30% each. At the end they get a score for each key area that they can use to understand strengths and weaknesses.

**PH:** The transformation area, examples would help. We have a knowledge library with case studies. Integrating that would be interesting.

**J:** That would be great. We could give them tailored case studies based on their lowest score.

**PH:** Yes. Big food businesses don't want to be the outlier. They want to know what good looks like. FOMO helps too, aspirational comparisons. Ultimately I want them to see how they are doing overall and then work on their weakest areas.

**PH:** I like it. Really good.

**J:** Do we have access to your best practices?

**PH:** Yes. After this meeting I'll get you access to our knowledge library. Let me check with the Head of Standards, but it should be fine.

**B:** Perfect. We will send you our table afterwards as well.

**PH:** Oddly I just finished a large SOP project so my brain is full of tables. I'll need to take a minute to look at it.

**N:** Sorry we didn't share it before.

**PH:** It's all good. What are your next steps?

**B:** We talked to Graham yesterday. The logical build-up is: literature review → identify impactful indicators → first FMG Light draft → field visit and interviews → interview with you → final FMG Light tool aligned with SME needs and SRA logic.

**J:** We will have the table with questions, stages, and a column backing up each criterion. Then we will do the evaluation scoring.

**PH:** One quick question: consultants cost around £1,000 per day. There is a barrier to assessment. Since this is a light version, what are your thoughts on cost? Contact time? Integration of AI? Automated onboarding? Recording interviews and using AI to extract answers? Also: how do you ensure continuity if staff change mid-assessment?

**B:** We haven’t thought about this part yet, but it would be interesting to explore.

**PH:** You've done a lot of work. I know exactly how much work this is. Well done. Processing and understanding the full standard, benchmarking it against other examples, very thorough.

**N:** Thank you.

**PH:** I’ll get you onto the knowledge library. Pull out details, case studies, examples. Later you can think about reporting.

**J:** Thank you very much.

**PH**: Thank you. Merry Christmas if I don’t see you before.

# **Appendix 11:** Full FMG-Light V1 with FMG, GRI, ETIS and EMAS Alignment

| **FMG Light Version 1** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Sourcing** | **Indicator** | **Stage 1 - Awareness** | **Stage 2 - Integration** | **Stage 3 - Transformation** | **FMG Alignment** | **GRI Alignment** | **ETIS Alignment** | **EMAS Alignment** |
| **Celebrate Provenance** | | | | | | | | |
| Which of your products or ingredients are currently sourced from local or regional suppliers? | % local procurement | Some ingredients occasionally sourced locally, but not tracked or defined | Local suppliers identified and used regularly for key ingredients | >25–50% of ingredients sourced locally, spend or volume tracked annually | FMG Q2.9 - 2.14 | GRI 204-1 | ETIS B.5.2.1. | Indirect Environmental Aspects |
| How do you define 'local' (e.g., by distance, region or supplier type)? | Local sourcing definition | No formal definition; based on supplier reputation or proximity | Clear internal definition of 'local' (e.g., ≤250 km or within Portugal) | Definition embedded in procurement policy and supplier contracts | FMG Q2.8 | GRI 204-2 | ETIS B.5.1.2 | Context of the Organization (Annex I) |
| Are menus planned based on seasonal availability? | Seasonal menu planning | Occasionally adjusted based on availability | Menus change seasonally (2–4 times per year) using local supply calendrs | Menu planning fully aligned with supplier harvest/season cycles | FMG Q2.17 | GRI 13.9.1 | ETIS D.2.1 | Core Indicator (Energy/Material Efficiency) |
| Do you promote local or Portuguese products to guests? | Communication of provenance | Occasionally highlighted on menus or displays | Regularly promoted in menus and storytelling | Marketing strategy built around provenance and local identity | FMG Q2.6 | GRI 414-1 | ETIS C.4.1 | External Communication (Annex IV) |
| **Support Farmers and Fishers** | | | | | | | | |
| Do you purchase directly from any small-scale farmers, fishers, or local producers? | Direct trade relationships | Occasionally or informally | Established relationships with small producers for key items | Direct-trade contracts or cooperatives in place | FMG Q3.7 | GRI 204-1 | ETIS B.5.2.1. | Indirect Environmental Aspects (Annex I) |
| How do you ensure fairness and reliability in your relationships with local producers? | Supplier partnership duration | Purchases made ad hoc | Medium-term commitments (seasonal or annual) | Multi-year partnerships with stability and knowledge sharing | FMG Q3.8 | GRI 414-1 | ETIS B.5.2.1. | Corporate Social Responsibility (CSR) Integration |
| Are there long-term contracts or partnerships with these suppliers? | Fair trade assurance | Trust-based, informal agreements | Basic written agreements ensuring reliability | Formal procurement policies promoting fair pricing and collaboration | FMG Q3.6 | GRI 2-6 | ETIS A.2.1 | Green Public Procurement (GPP) |
| **More Plants, Better Meat** | | | | | | | | |
| What proportion of your menu is plant-based or vegetarian? | Plant-forward menu share | ≤20%, no structured approach | 30–40% plant-forward, reviewed seasonally | ≥50%, strategic shift supported by training and customer communication | FMG Q4.2 | GRI 305-3, 302 | ETIS D.2.1 | Green Public Procurement (GPP) TS1 |
| How do you decide which meat and protein sources to use? | Sustainable meat criteria | Based on cost or availability | Some suppliers chosen for sustainability credentials | Clear sourcing policy prioritising certified, low-impact meat and dairy | FMG Q4.1 | GRI 13-11 | ETIS D.7.1 | GPP Award Criteria (AC 3.2 |
| Have you considered introducing more plant-forward or hybrid dishes? | Menu innovation | Awareness exists, but no action | Pilot dishes or small menu section introduced | Integrated plant-forward design across the full menu | FMG Q4.1 - 4.3 | GRI 306-2 | ETIS C.2.1 | Continuous Improvement |
| **Sustainable Seafood** | | | | | | | | |
| What seafood species are used most frequently? | Seafood species list | No monitoring or documentation | Species tracked for main menu items | Seafood list managed with supplier sustainability input | FMG Q5.6 - 5.8 | GRI 304-4, 13 | ETIS D.7.1 | Significant Environmental Aspects (Annex I) |
| How do you verify seafood sustainability (certification or assurance)? | % certified seafood | Supplier trust-based | Certificates (MSC, ASC) requested for key species | 100% traceable and certified seafood sourcing policy | FMG Q5.2 - 5.5 | GRI 308-41, 13 | ETIS D.4.1 | Green Public Procurement (GPP) |
| Do you use local or underutilised species? | Biodiversity-friendly sourcing | Occasionally | Promoted through special menus | Embedded in purchasing and culinary concept | FMG Q5.9 - 5.11 | GRI 304 | ETIS C.4.1 | Core Indicator – Biodiversity |
| **Society** | **Indicator** | **Stage 1 – Awareness** | **Stage 2 – Integration** | **Stage 3 – Transformation** | **FMG Alignment** | **GRI Alignment** | **ETIS Alignment** | **EMAS Alignment** |
| **Treat People Fairly** | | | | | | | | |
| Are written policies for pay equity, contracts, working hours, anti-discrimination, grievance, and wellbeing accessible and implemented? | Existence & accessibility of core HR policies in all langues | Policies exist but are informal or inconsistently applied | Policies formalised, accessible, and regularly communicated to staff | Policies embedded in management practice with routine monitoring and updates | FMG Q7.1-7.8 | GRI 401-2, GRI 406 | ETIS B.3 | Procedures, documentation (Annex II), Employee involvement (Art. 1) |
| Have staff wellbeing surveys been conducted in the past 12 months? | Annual well-being survey | No formal survey process, well-being checked informally | Annual survey implemented with follow-up actions | Continuous monitoring with structured programmes and leadership review | FMG Q7.47-7.48 | GRI 403-6, 403-7 | ETIS B.3 | Continuous improvement cycle, stakeholder input |
| What health or wellbeing supports are provided? | documented well-being supports | Limited or ad-hoc well-being offers | Well-being supports available and communicated; staff usage monitored | Comprehensive wellbeing programme with enhanced benefits and long-term planning | FMG Q7.49 | GRI 403-6 | ETIS C.2 | Operational control (Annex II A.4), Employee involvement (Art. 1) |
| Do staff receive regular training on skills, diversity, progression, and wellbeing? | Minimum 40 training hours/year/employee, including at leats 1 D&I or wellbeing session and 1 skills progression session | Training delivered occasionally without tracking. | Regular training schedule, participation documented | Integrated training framework linked to progression and performance reviews | FMG Q7.35-7.46 | GRI 404-1, 404-2, 404-3, 406-1 | ETIS B.3 | Training and competence (Annex II A.4.2) |
| Are staff informed of their right to freedom of association? | Communication of rights and representation channels | Limited awareness of rights and channels | Rights communicated during onboarding and reviewed periodically | Freedom of association actively supported with clear processes and staff representation | FMG Q7.32-7.34 | GRI 402-1, 407 | ETIS B.3 | Internal communication (Annex II A.4.3) |
| What measures ensure inclusivity and accessibility? | Implementation of inclusion and accessibility measures | Basic inclusion practices, limited accessibility adjustments | DEI practices implemented; accessibility improvements underway | Full accessibility plan completed; ongoing reviews; inclusive culture promoted | FMG Q7.41-7.46 | GRI 406, 406, 413 | ETIS C.4 | Operational control (Annex II A.4) |
| **Feed People Well** | | | | | | | | |
| Is healthy, nutritious food provided to staff consistent with recognised guidelines? | At least one nutritious staff meal per shift | Staff meals available but not nutritionally structured | Guidelines for balanced meals, feedback collected | Nutrition policy aligned with standards, menus reviewed regularly | FMG Q7.51 and Q8.8 | GRI 403-6, 403-7 | ETIS C.2 | Operational procedures (Annex II A.4) |
| How are staff dietary needs supported? | Accommodation of dietary, cultural, religious, and medical needs | Dietary needs addressed informally | Processes in place to accommodate dietary requirements | Systematic dietary management with proactive communication and monitoring | FMG Q8.1-8.9 | GRI 406, 403-6 | ETIS B.3 | Internal communication and procedures (Annex II A.4, A.4.3) |
| Is allergen and food-safety training provided to all culinary staff? | 100% of culinary staff trained annually in allgern & food saftey | Training delivered inconsistently | Regular training scheduled, documentation maintained | Advanced training integrated with HACCP and external audits | FMG Q8.6-8.9 | GRI 403-5, 403-2 | ETIS C.2 | Training and competence (Annex II A.4.2) |
| Are incident responses documented and reviewed? | All incidents documented & reviewed quartualy | Incident logging inconsistent | Incidents documented and reviewed periodically | Trends analysed, corrective actions implemented and evaluated | FMG Q8.17 | GRI 403-2 | ETIS C.2 | Internal audit and corrective action (Annex II A.5.5), Management review (Annex II A.6) |
| **Support The Community** | | | | | | | | |
| How are local hiring and community engagement practices embedded in operations? | >40% local hiring, including entrylevel inclusion | Local engagement informal or occasional | Local hiring prioritised, engagement plan in place | Long-term partnerships with measurable impact and staff participation | FMG 7.46 and Q9.1-.7 | GRI GRI 202-2, 413-1 | ETIS C.5 | Indirect environmental aspects (Annex I) |
| How do you support local producers or cultural initiatives? | stakeholder engegement aligned with local community practicies | Occasional local purchases or participation in activities | Formal relationships with local producers or cultural groups | Embedded support through procurement, programming, and ongoing collaboration | FMG Q9.1-9.12 | GRI 204-1, 413 | ETIS B.4, C.5 | Indirect environmental aspects (Annex I) |
| How does the organisation communicate social impact and community work? | >2 community engagenemt initiatioves pers year + >1 formal local partnership | Communication informal or irregular | Impact communicated via selected channels | Structured communication strategy with regular reporting and updates | FMG Q10.1-10.6 | GRI 413-1 | ETIS C.1, C.5 | Public reporting (Annex IV), Stakeholder dialogue (Art. 1) |
| **Environment** | **Indicator** | **Stage 1 - Awarness** | **Stage 2 - Integration** | **Stage 3 - Transformation** | **FMG Alignment** | **GRI Alignment** | **ETIS Alignment** | **EMAS Alignment** |
| **Reduce your Footprint** | | | | | | | | |
| Do you use energy-efficient equipment (LEDs, sensors, timers) or simple energy-saving routines? | Energy-efficient equipment or routines | Some LEDs or timers in place, informal switch-off habits, inconsistent implementation | SOP for energy routines, LEDs widely installed; sensors and timers used systematically | Monthly kWh tracked, annual reduction target: energy reduced by ≥ 5–10%, energy intensity ≤ 35 kWh/guest-night | FMG Q11.7–11.17 | GRI 302-1, 302-4 | ETIS D.6.1 | Core Indicator – Energy efficiency (E1) |
| Do you have basic water-efficiency measures (aerators, low-flow taps, leak reporting)? | Basic water-efficiency measures | Aerators/low-flow taps in some areas, leak reporting informal | Water-efficient appliances installed, leak checks part of SOPs | Water tracked monthly ($m^3$), water-use intensity ≤ 200 L/guest-night or ≥10% reduction from previous year; leak resolution within 24–48 hours | FMG Q11.27–11.32 | GRI 303-1, 303-5 | ETIS D.5.1 | Core Indicator – Water consumption (E3) |
| Is any electricity or heat sourced from renewable/low-carbon options? | Renewable/low-carbon energy sourcing | Small amount of green energy or solar, informal awareness only | Renewables formalised, carbon policy established | ≥20% electricity from renewable sources, Scope 1–2 $CO_2$ emissions monitored, annual $CO_2$ reduced by 5% | FMG Q11.18–11.25 | GRI 302-1, 305-1/2 | ETIS D.6.3 | Core Indicators – Energy & Emissions (E1 + E6) |
| Do you use low-toxicity, eco-labelled cleaning chemicals and ensure safe storage? | Low-toxicity eco-chemicals and safe storage | Some eco-chemicals used, chemicals stored informally without labelling or designated areas | ≥50% eco-labelled chemicals, MSDS available, staff trained, safe storage | Chemical inventory tracked, ≥80% eco-labelled chemicals, wastewater and FOG controls in place | FMG Q11.37–11.39 | GRI 306-3, GRI 308 | ETIS D.4.1 | Chemicals / pollution risk (Annex I) |
| **Waste no Food** | | | | | | | | |
| Do you have routines to prevent food waste (portioning, storage, prep control)? | Food-waste prevention routines | Inconsistent portioning, storage and prep control, FIFO applied irregularly; buffet quantities not adjusted to demand | Written prevention SOP, trained staff; consistent portioning, storage and prep control, smaller buffet replenishment, non-weight logs or visual tracking | Weekly weight-based measurement (kg), targets set: kitchen waste reduced 20–30%, buffet waste ≤10% of production; corrective actions documented | FMG Q12.1–12.9 | GRI 306-1 | ETIS D.3.1 | Food-waste prevention (Annex I) |
| Do you measure or observe food waste in kitchens or buffets? | Measurement or observation of food waste | Occasional visual checks only, no systematic recording | Logbooks for buffet/plate/prep waste maintained | Weekly weight-based tracking, corrective actions documented, meal-specific waste ≤150 g per cover | FMG Q12.5–12.7 | GRI 306-3 | ETIS D.3.1 | Food-waste generation pattern (Annex I) |
| Do you redistribute safe surplus food (Too Good To Go, Zero Desperdício, staff meals)? | Redistribution of safe surplus food | Informal staff reuse, no structured process | Donation partner in place, labelled storage for safe surplus | Quantity redistributed tracked, KPIs: ≥50% surplus redistributed, ≥30 kg/month surplus recovered (size-adjustable) | FMG Q12.8–12.10 | GRI 306-4 | ETIS D.3.2 | Resource efficiency / food surplus (Annex I) |
| Do you separate unavoidable food waste and know how it is disposed of (landfill, incineration, composting/biodigestion)? | Responsible disposal of unavoidable food waste | Food waste mixed with general waste, no knowledge of contractor disposal route | Food waste separated, contractor disposal method confirmed (landfill/composting/biodigestion) | ≥50% diversion from landfill, composting or biodigestion verified | FMG Q12.10–12.15 | GRI 306-4+G39-5 | ETIS D.3.2 | Core Indicator – Waste (E4) |
| **Reduce, Reuse, Recycle** | | | | | | | | |
| Do you segregate non-food waste into at least three streams (recycling, general waste, organics)? | Three-stream waste sorting | Three bins in BOH but inconsistent use | Site-wide sorting system, SOP in place, staff trained | Diversion rate monitored; ≥60–70% diversion (recycling + organics), contamination ≤10% | FMG Q13.11–13.19 | GRI 306-2/3 | ETIS D.3.2 | Food-waste prevention (Annex I) |
| Have you reduced single-use items using refill or reuse systems? | Reduction of single-use items | Ad hoc removal of obvious single-use items (straws, bottles) | Refill amenities, bulk cleaning supplies in use | % single-use items eliminated tracked, ≥80% reduction by units, all disposable amenity items removed from guestrooms | FMG Q13.05–13.10 | GRI 301-1 | ETIS D.2.1 | Food-waste generation pattern (Annex I) |
| Do suppliers provide recyclable, refillable or take-back packaging? | Supplier circularity | Some recyclable packaging used; no criteria | Environmental criteria applied in purchasing, suppliers encouraged to provide take-back/refill solutions | Supplier compliance monitored, ≥50% suppliers meeting environmental criteria, ≥30% providing take-back/refill options | FMG Q11.33–11.36 | GRI 308-1/-2, 301-3 | ETIS D.3.2 | Supply-chain packaging impacts (Annex I) |
| Do you annually review environmental performance (energy, water, waste)? | Annual environmental performance review | No structured review, occasional informal discussion | Annual review using bills and contractor data, improvement actions identified | Full annual environmental report; PDCA targets updated, ≥3 improvement actions completed per year | FMG Q11.1–11.6 | GRI 103 (Management approach) | ETIS A.1.1 | External Reporting Requirement – Environmental statement & updates (Annex III & IV) |

# **Appendix 12:** Full FMG-Light V2 with FMG, GRI, ETIS and EMAS Alignment

| FMG Light Version 2 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Sourcing** | **Indicator** | **Stage 1 - Awareness** | **Stage 2 - Integration** | **Stage 3 - Transformation** | **FMG Alignment** | **GRI Alignment** | **ETIS Alignment** | **EMAS Alignment** |
| | | | | | | | | |
| **Celebrate Provenance** | | | | | | | | |
| Do you define what counts as "local" sourcing? | Locality Definition | Written definition of 'local' exists (distance, region, supplier type) | Definition used consistently in menu descriptions & internal communication | Definition embedded in procurement guidelines & supplier evaluations | FMG Q2.9 - 2.14 | GRI 204-1 | ETIS B.5.2.1. | Indirect Environmental Aspects |
| Do you document seasonal changes in menu planning? | Seasonality Log | At least two seasonal menu changes recorded per year. | Menu planning aligns with a simple seasonality calendar or supplier availability list | Seasonal menu planning integrated into procurement cycles & supplier | FMG Q2.8 | GRI 204-2 | ETIS B.5.1.2 | Context of the Organization (Annex I) |
| Do you communicate provenance in a structured way? | Provenance Communication | Record where and how provenance is currently mentioned | Standardise two provenance statements (e.g., "from Torres Vedrasregion") | Provenance becomes part of brand storytelling (menu section, chef'snotes) | FMG Q2.17 | GRI 13.9.1 | ETIS D.2.1 | Core Indicator - Energy (E1) +Material Efficiency (E2) |
| | | | | | | | | |
| **Support Farmers and Fishers** | | | | | | | | |
| Do you understand which supplier claims are trust-based vs. documented? | Supplier Assurance Mapping | Identify which suppliers provide verbal vs. documented sustainability claims. | Request documentation for one key product category | Establish a simple internal verification procedure for high-impact categories | FMG Q3.7 | GRI 204-1 | ETIS B.5.2.1. | Indirect Environmental Aspects (Annex I) |
| Do you review regional suppliers within its purchasing autonomy? | Structured Local Supplier Review | List all regional suppliers controllable at unit level | Conduct one annual review (availability, reliability, seasonality) | Introduce informal criteria/expectations for ongoing collaboration | FMG Q3.8 | GRI 414-1 | ETIS B.5.2.1. | Corporate Social Responsibility (CSR) Integration |
| Do you cultivate long-term relationships with regional producers? | Multi-Year Producer Partnerships | Identify at least one potential producer for long-term collaboration | Establish one ≥1-year partnership (within autonomy) | Partnership formalised via annual meetings & joint planning | FMG Q3.6 | GRI 2-6 | ETIS A.2.1 | Green Public Procurement (GPP) |
| | | | | | | | | |
| **More Plants, Better Meat** | | | | | | | | |
| Do you demonstrate menu adaptability (substitution, plant-forward integration)? | Menu Adaptation Capability | ≥2 examples/year of menu adjustments (seasonality, availability, sustainability) | Systematic protein substitution, ≥1 plant-forward buffet option | Plant-forward defaults adopted on selected menus + guest communication | FMG Q4.2 | GRI 305-3, 302 | ETIS D.2.1 | Green Public Procurement (GPP) TS1 |
| Do you hotel document meat quality and welfare information? | Meat Quality & Sourcing Notes | Record available information on origin, cut, breed, welfare where provided | Identify one higher-welfare meat source used occasionally | Demonstrate gradual increase in "better meat" (no rigid quotas) | FMG Q4.1 | GRI 13-11 | ETIS D.7.1 | GPP Award Criteria (AC 3.2) |
| | | | | | | | | |
| **Sustainable Seafood** | | | | | | | | |
| Do you maintain visibility over the seafood species it uses? | Seafood Species Inventory | List top 5 seafood species used annually | Add origin, production method (wild/farmed), supplier name | Use species inventory to shape menu choices & procurement decisions | FMG Q5.6 - 5.8 | GRI 304-4, 13 | ETIS D.7.1 | Significant Environmental Aspects (Annex I) |
| Do you verify sustainability information for its seafood? | Basic Verification Protocol | Request documentation for one seafood speciesper year | Verification expanded to >1 species, supplier communication documented | Verification integrated into annual procurement review | FMG Q5.2 - 5.5 | GRI 308-41, 13 | ETIS D.4.1 | Green Public Procurement (GPP) |
| What proportion of seafood can be demonstrably verified as sustainable? | Verified Sustainable Seafood Share | Determine whether any portion can be verified | Reach 10-20% verified (flexible, context-dependent) | Progress toward 40-60% verified, acknowledging supply limits | FMG Q5.9 - 5.11 | GRI 304 | ETIS C.4.1 | Core Indicator – Biodiversity |
| **Environment** | **Indicator** | **Stage 1 - Awareness** | **Stage 2 - Integration** | **Stage 3 - Transformation** | **FMG Alignment** | **GRI Alignment** | **ETIS Alignment** | **EMAS Alignment** |
| | | | | | | | | |
| **Reduce your Footprint** | | | | | | | | |
| Do you use energy-efficient equipment (LEDs, sensors, timers) or simple energy-saving routines? | Energy-efficient equipment or routines | Some LEDs/timers in place, informal switch-off habits | LEDs used property-wide; sensors and timers implemented systematically, shutdown routines in SOPs | Monthly kWh tracked, annual reduction target in place, energy intensity monitored | FMG Q11.7–11.17 (Energy efficiency) | GRI 302-1/4 | ETIS D.6.1 | Core Indicator – Energy (E1) (Annex IV-C: total energy use) |
| Do you have basic water-efficiency measures (aerators, low-flow taps, leak reporting)? | Basic water-efficiency measures | Aerators/low-flow taps installed in selected areas, informal leak reporting | Water-efficient fixtures installed widely, leak checks routine, towel/linen reuse promoted | Monthly water use tracked, water-intensity targets set, systematic leak-management procedures | FMG Q11.27–11.32 (Water efficiency) | GRI 303-1/5 | ETIS D.5.1 | Core Indicator – Water (E3) (Annex IV-C: total water |
| Is any electricity or heat sourced from renewable/low-carbon options? | Renewable/low-carbon energy sourcing | Initial awareness of renewable options, occasional renewable purchases | Green-tariff purchasing where available, supplier engagement to increase renewable share | Renewable share reported, continuous increase in renewable sourcing targeted annually | FMG Q11.18–11.25 (Low-carbon/ renewables) | GRI 302-1; 305-1/2 | ETIS D.6.1+D.6.3 | Core Indicators – Energy (E1) & Emissions (E6) |
| Do staff independently initiate or propose environmental improvements? | Staff environmental agency | Occasional ad hoc initiatives driven by motivated individuals | Staff routinely suggest improvements, informal environmental champions recognised within departments | Staff agency formalised through roles and regular improvement cycles | Cross-cutting (implicit) | GRI 103-1/2/3 (Management Approach) | ETIS A.1.1 | Employee involvement & continual improvement (Annex II) |
| Do you manage operational chemicals responsibly (cleaning products, pool chemicals, etc.)? | Chemical management | Use of eco-labelled cleaning products, basic storage | Chemical-handling SOPs implemented, staff trained; eco-labelled products standard | Annual review of chemical inventory, supplier environmental performance integrated into procurement | FMG Q11.37–11.39 (Pollution & chemicals) | GRI 306-5 + 308-1 + 3 | ETIS D.4.1 | Hazardous substances (Annex I) |
| | | | | | | | | |
| **Waste no Food** | | | | | | | | |
| Do you track where food waste occurs (kitchen, buffet, plate)? | Food-waste hotspot tracking | Staff awareness of waste-generating areas; informal adjustments | Written prevention SOP, trained staff, consistent portioning smaller buffet replenishment | Food-waste hotspots recorded, improvement actions reviewed regularly | FMG Q12.1–12.4 | GRI 306-1/2 | ETIS D.3.1 | Core Indicator – Waste (E4) |
| Is supervision in place to reduce avoidable food waste? | Food-waste supervision | Informal supervision during preparation and service | Systematic supervision of buffet and kitchen, portion-control routines implemented | Supervision routines formalised, logs maintained; reduction improvements tracked | FMG Q12.5–12.7 | GRI 306-2 | ETIS D.3.1 | Waste Prevention (Annex I) |
| Do you redistribute safe surplus food (Too Good To Go, Zero Desperdício,+A35:E35 staff meals)? | Redistribution of safe surplus food | Informal staff reuse, no structured process | Donation partner in place, labelled storage for safe surplus | Quantity redistributed tracked, ≥50% surplus redistributed | FMG Q12.8–12.10 | GRI 306-4 | ETIS D.3.2 | Resource Efficiency (Annex I) |
| Do you separate food waste from other waste streams? | Food-waste segregation | Limited separation; basic bin availability | Segregation in kitchen and service areas, staff trained | Consistent property-wide food-waste segregation, clear reduction and diversion targets | FMG Section 12 end-of-chain handling | GRI 306-3/4/5 | ETIS D.3.2 | Core Indicator – Waste (E4) |
| | | | | | | | | |
| **Reduce - Reuse - Recycle** | | | | | | | | |
| Do you segregate non-food waste into at least three streams (recycling, general waste, organics)? | Waste segregation | At least three bins in BOH, inconsistent sorting | SOPs for waste sorting, staff trained, multiple stations provided | Consistent property-wide segregation, SOP compliance monitored, contractor reporting reviewed where available | FMG Q13.13–13.19 | GRI 306-2/3/4/5 | ETIS D.3.2 | Core Indicator – Waste (E4) |
| Do you manage textiles and laundry to reduce environmental impact? | Linen & laundry efficiency | Guests encouragment: visible nudges (e.g., towel reuse cards) | Towel/linen-reuse SOPs implemented; reduced-frequency laundry cycles | Laundry environmental performance tracked, reduction targets set | FMG 11.39; 13.12; 13.34-35 | GRI 303-2/5, 302-1 | ETIS D.3.1 | Core Indicator – Water (E3) and Energy (E1) |
| **Society** | **Indicator** | **Stage 1 - Awareness** | **Stage 2 - Integration** | **Stage 3 - Transformation** | **FMG Alignment** | **GRI Alignment** | **ETIS Alignment** | **EMAS Alignment** |
| | | | | | | | | |
| **Treat People Fairly** | | | | | | | | |
| Are written policies for pay equity, contracts, working hours, anti-discrimination, grievance, and wellbeing accessible and implemented? | Core HR policy access | Basic written policies exist and are communicated during onboarding and visible in staff areas | Policies updated annually and accessible in two languages with clear grievance channels | Policies integrated in a formal HR manual with digital access and annual audits | FMG Q7.1-7.8 | GRI 401-2, GRI 406 | ETIS B.3 | Procedures, documentation (Annex II), Employee involvement (Art. 1) |
| Have staff wellbeing surveys been conducted in the past 12 months? | Regular well-being surveys | A basic well-being or climate survey conducted at least once per year | Results reviewed with departments and at least one improvement implemented | Well-being KPIs tracked and integrated into annual HR planning | FMG Q7.47-7.48 | GRI 403-6, 403-7 | ETIS B.3 | Continuous improvement cycle, stakeholder input |
| What health or wellbeing supports are provided? | Well-being support provision | At least one well-being support provided and communicated | Supports documented and uptake monitored with periodic communication | Holistic well-being programme with annual evaluation and usage tracking | FMG Q7.49 | GRI 403-6 | ETIS C.2 | Operational control (Annex II A.4), Employee involvement (Art. 1) |
| Do staff receive regular training on skills, diversity, progression, and wellbeing? | Staff training programme | Mandatory training provided with occasional in-person sessions | A structured training plan with logs and bilingual materials implemented | Formal annual reviews and progression pathways with training KPIs | FMG Q7.35-7.46 | GRI 404-1, 404-2, 404-3, 406-1 | ETIS B.3 | Training and competence (Annex II A.4.2) |
| Are staff informed of their right to freedom of association? | Rights and representation info | Basic verbal or written communication on freedom of association during onboarding | Information reinforced in staff communications and available in two languages | Rights embedded in policies and reviewed through annual staff feedback | FMG Q7.32-7.34 | GRI 402-1, 407 | ETIS B.3 | Internal communication (Annex II A.4.3) |
| What measures ensure inclusivity and accessibility? | Inclusion and accessibility measures | Basic accommodation of needs on request with general awareness | Accessibility measures documented and periodically reviewed | Formal inclusivity plan with KPIs and annual improvement actions | FMG Q7.41-7.46 | GRI 406, 406, 413 | ETIS C.4 | Operational control (Annex II A.4) |
| | | | | | | | | |
| **Feed Staff Well** | | | | | | | | |
| Is healthy, nutritious food provided to staff consistent with recognised guidelines? | Nutritious staff meals | Daily meals provided with at least one balanced or vegetarian option | Basic nutrition guidelines used in menu planning; staff feedback collected | Structured nutrition plan with annual evaluation and KPIs | FMG Q7.51 and Q8.8 | GRI 403-6, 403-7 | ETIS C.2 | Operational procedures (Annex II A.4) |
| How are staff dietary needs supported? | Dietary needs support | Dietary needs accommodated verbally upon request | Documented procedure for managing dietary needs and training for kitchen staff | Proactive dietary management system with monitoring and documentation | FMG Q8.1-8.9 | GRI 406, 403-6 | ETIS B.3 | Internal communication and procedures (Annex II A.4, A.4.3) |
| Is allergen and food-safety training provided to all culinary staff? | Allergen and safety training | Basic allergen knowledge communicated verbally | Annual allergen and food-safety training documented | Comprehensive allergen management with audits and incident monitoring | FMG Q8.6-8.9 | GRI 403-5, 403-2 | ETIS C.2 | Training and competence (Annex II A.4.2) |
| Are incident responses documented and reviewed? | Incident documentation review | Basic verbal reporting of incidents | Incidents logged and reviewed periodically | Formal system with trend analysis and annual reporting | FMG Q8.17 | GRI 403-2 | ETIS C.2 | Internal audit and corrective action (Annex II A.5.5), Management review (Annex II A.6) |
| | | | | | | | | |
| **Support the Community** | | | | | | | | |
| How are local hiring and community engagement practices embedded in operations? | Local hiring | Some local hiring and at least one community initiative annually | Documented local hiring practices and community activity log | Long-term partnerships and annual community impact reporting | FMG 7.46 and Q9.1-.7 | GRI GRI 202-2, 413-1 | ETIS C.5 | Indirect environmental aspects (Annex I) |
| How do you support local producers or cultural initiatives? | Support for local partners | Some local suppliers or occasional cultural collaborations | Updated supplier list tracking local purchases or collaborations | Strategic partnerships with local producers and cultural institutions | FMG Q9.1-9.12 | GRI 204-1, 413 | ETIS B.4, C.5 | Indirect environmental aspects (Annex I) |
| How does the organisation communicate social impact and community work? | Community impact communication | Basic verbal or informal communication of initiatives | Documented communication through staff briefings or guest materials | Annual social impact summary shared internally and externally | FMG Q10.1-10.6 | GRI 413-1 | ETIS C.1, C.5 | Public reporting (Annex IV), Stakeholder dialogue (Art. 1) |
| **Environment** | **Indicator** | **Stage 1 - Awareness** | **Stage 2 - Integration** | **Stage 3 - Transformation** | **FMG Alignment** | **GRI Alignment** | **ETIS Alignment** | **EMAS Alignment** |
| | | | | | | | | |
| **Reduce your Footprint** | | | | | | | | |
| Do you use energy-efficient equipment (LEDs, sensors, timers) or simple energy-saving routines? | Energy-efficient equipment or routines | Some LEDs/timers in place, informal switch-off habits | LEDs used property-wide, sensors and timers implemented systematically, shutdown routines in SOPs | Monthly kWh tracked, annual reduction target in place;,energy intensity monitored | FMG Q11.7–11.17 (Energy efficiency) | GRI 302-1/4 | ETIS D.6.1 | Core Indicator – Energy (E1) (Annex IV-C: total energy use) |
| Do you have basic water-efficiency measures (aerators, low-flow taps, leak reporting)? | Basic water-efficiency measures | Aerators/low-flow taps installed in selected areas, informal leak reporting | Water-efficient fixtures installed widely, leak checks routine, towel/linen reuse promoted | Monthly water use tracked, water-intensity targets set, systematic leak-management procedures | FMG Q11.27–11.32 (Water efficiency) | GRI 303-1/5 | ETIS D.5.1 | Core Indicator – Water (E3) (Annex IV-C: total water consumption) |
| Is any electricity or heat sourced from renewable/low-carbon options? | Renewable/low-carbon energy sourcing | Initial awareness of renewable options, occasional renewable purchases | Green-tariff purchasing where available, supplier engagement to increase renewable share | Renewable share reported; continuous increase in renewable sourcing targeted annually | FMG Q11.18–11.25 (Low-carbon/renewables) | GRI 302-1; 305-1/2 | ETIS D.6.1+D.6.3 | Core Indicators – Energy (E1) & Emissions (E6) |
| Do staff independently initiate or propose environmental improvements? | Staff environmental agency | Occasional ad hoc initiatives driven by motivated individuals | Staff routinely suggest improvements, informal environmental champions recognised within departments | Staff agency formalised through roles and regular improvement cycles | Cross-cutting (implicit) | GRI 103-1/2/3 (Management Approach) | ETIS A.1.1 | Employee involvement & continual improvement (Annex II) |
| Do you manage operational chemicals responsibly (cleaning products, pool chemicals, etc.)? | Chemical management | Use of eco-labelled cleaning products, basic storage | Chemical-handling SOPs implemented, staff trained, eco-labelled products standard | Annual review of chemical inventory, supplier environmental performance integrated into procurement | FMG Q11.37–11.39 (Pollution & chemicals) | GRI 306-5 + 308-1 + 3 | ETIS D.4.1 | Hazardous substances (Annex I) |
| | | | | | | | | |
| **Waste no Food** | | | | | | | | |
| Do you track where food waste occurs (kitchen, buffet, plate)? | Food-waste hotspot tracking | Staff awareness of waste-generating areas, informal adjustments | Written prevention SOP, trained staff, consistent portioning smaller buffet replenishment | Food-waste hotspots recorded, improvement actions reviewed regularly | FMG Q12.1–12.4 | GRI 306-1/2 | ETIS D.3.1 | Core Indicator – Waste (E4) |
| Is supervision in place to reduce avoidable food waste? | Food-waste supervision | Informal supervision during preparation and service | Systematic supervision of buffet and kitchen, portion-control routines implemented | Supervision routines formalised, logs maintained, reduction improvements tracked | FMG Q12.5–12.7 | GRI 306-2 | ETIS D.3.1 | Waste Prevention (Annex I) |
| Do you redistribute safe surplus food (Too Good To Go, Zero Desperdício,+A35:E35 staff meals)? | Redistribution of safe surplus food | Informal staff reuse, no structured process | Donation partner in place, labelled storage for safe surplus | Quantity redistributed tracked, ≥50% surplus redistributed | FMG Q12.8–12.10 | GRI 306-4 | ETIS D.3.2 | Resource Efficiency (Annex I) |
| Do you separate food waste from other waste streams? | Food-waste segregation | Limited separation, basic bin availability | Segregation in kitchen and service areas, staff trained | Consistent property-wide food-waste segregation, clear reduction and diversion targets | FMG Section 12 end-of-chain handling | GRI 306-3/4/5 | ETIS D.3.2 | Core Indicator – Waste (E4) |
| | | | | | | | | |
| **Reduce - Reuse - Recycle** | | | | | | | | |
| Do you segregate non-food waste into at least three streams (recycling, general waste, organics)? | Waste segregation | At least three bins in BOH, inconsistent sorting | SOPs for waste sorting, staff trained, multiple stations provided | Consistent property-wide segregation, SOP compliance monitored, contractor reporting reviewed where available | FMG Q13.13–13.19 | GRI 306-2/3/4/5 | ETIS D.3.2 | Core Indicator – Waste (E4) |
| Do you minimise single-use products and adopt refillables? | Refillables & single-use reduction | Ad hoc removal of obvious single-use items (e.g. straws, bottles), basic paper reduction | Refillable amenities widely adopted, digital processes normalised | Single-use reduction targets implemented, annual reduction monitored, all disposable amenity items removed | FMG Q13.05–13.11 | GRI 301-1/3 | ETIS D.2.1 | Core Indicator – Material Efficiency (E2) |
| Do you manage textiles and laundry to reduce environmental impact? | Linen & laundry efficiency | Guests encouragment: visible nudges (e.g. towel reuse cards) | Towel/linen-reuse SOPs implemented, reduced-frequency laundry cycles | Laundry environmental performance tracked, reduction targets set | FMG 11.39; 13.12; 13.34-35 | GRI 303-2/5, 302-1 | ETIS D.3.1 | Core Indicator – Water (E3) and Energy (E1) |

## **Appendix 13:** Thematic Coding Matrices

| Coding Matrix | | | |
|---|---|---|---|
| **Sourcing** | | | |
| **Deductive Dimension** | **Inductive Theme** | **Aggregated Codes** | **Representative Data Segment** |
| Celebrate Provenance | Locality as an informal operational routine | Seasonality; Local Spend; Local Definition | "Definitions of locality vary across departments… 'Torres Vedras area' vs 'around 50 kilometres'." |
| Support Farmers & Fishers | Influence of volume and governance | Supplier Engagement; Direct Purchasing | "If a menu includes sea bream, we need 200 consistent portions… small-scale local producers seldom have the capacity." |
| More Plants, Better Meat | Menu composition and operational adjustments | Menu Engineering; Meat Quality; Plant Ratio | "Serving a set menu for 50 guests requires around eight waiters, whereas a buffet requires about four." |
| Sustainable Seafood | Verification methods and data availability | Red List; Seafood Certification | "We do not have a clear method to verify sustainability. We rely on what suppliers tell us." |
| **Society** | | | |
| **Deductive Dimension** | **Inductive Theme** | **Aggregated Codes** | **Representative Data Segment** |
| Treat people Fairly | Fair Working Conditions & Policy | Contract Hours; Fair Wage; Policy Communication | "During the onboarding, we also talk about respect and non-discrimination." |
| Feed Staff Well | Wellbeing & Retention | Staff Meals; Well-being Support | "Employees who have been with the company for more than one year receive health insurance." |
| Support the Community | Community Engagement | Local Hiring; Charity Donation; Community Access | "Staff also participate in smaller community-driven initiatives such as food donations." |
| **Environment** | | | |
| **Deductive Dimension** | **Inductive Theme** | **Aggregated Codes** | **Representative Data Segment** |
| Waste No Food | Pollution & Waste (Data Gaps) | Prevention; Measurement | "Everything goes to the same bin… waste separation practically impossible." |
| Reduce Your Footprint | Energy and Water Management | Sustainable Operation; Equipment Efficiency; Water Efficiency; Energy Monitoring | "Precise values are 'not so important' for daily operational decisions." "Resort's amenities structurally elevate water consumption." |
| Reduce, Reuse, Recycle | Operational & Behavioral Levers | Recycling; Separation; Chemicals; Single Use Plastic | "Using smaller plates, reducing buffet display volumes." |