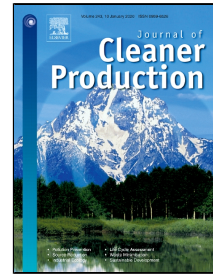


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SDGs and airport sustainable performance: Evidence from Italy on organisational, accounting and reporting practices through financial and non-financial disclosure



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SDGs and airport sustainable performance: Evidence from Italy on organisational, accounting and reporting practices through financial and non-financial disclosure

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This article investigates the 17 Sustainable Development Goals (SDGs) Agenda introduced by the United Nations in 2015 outlining if and which organisational, accounting and reporting practices are adopted to sustainable performance. Specifically, adopting the sustainability disclosure framework, we analyse how firms within the airport industry achieve the SDGs 11 and 17 showing how the initiatives are developed and implemented. Drawing from a broad review of the main contributions in the research and practice, we conduct a qualitative study through the reading and processing of financial statements and non-financial reports (sustainability and social reporting) of seven major strategic airport infrastructures in Italy to outline the initiatives implemented for meeting the SDGs. The main Italian airport infrastructures investigated still are not able to completely meet the SDGs goals, especially the SDGs 11 and 17, although they mention the SDGs in their financial and non-financial reporting, they still continue to develop and implement some specific initiatives to achieve high sustainable performance. This article outlines the need to create conditions for developing and better implementing the accounting and reporting practices, like the SBSC (Sustainable Balanced Scorecard), as well as adequate organizational architectures and educational training and management programs for achieving the SDGs goals within firms.

Key words: sustainability accounting; sustainable development goals; organisational, accounting and reporting practices; airport infrastructure; financial and non-financial disclosure; sustainable performance.

Paper type: Research paper.

1. Introduction

Since 2015 the research and practice have been increasing their interest to the sustainable performance with the introduction of the 17 Sustainable Development Goals (SDGs) Agenda by the United Nations (UN), which aim to promote and develop actions crucial for humanity and the planet over the next 15 years (United Nations, 2016). To achieve these 17 SDGs scholars and practitioners seek technical, organisational, managerial, accounting and reporting initiatives (Grainger-Brown and Malekpour, 2019; Rosati and Faria, 2019, 2018; Pahl-Wostl *et al.*, 2018; Liverman, 2018; Bruno *et al.*, 2018; Kaika, 2017; Yiu and Saner, 2017; Murray, 2015; Hawkes and Popkin, 2015; Williams, 2015; PwC, 2015, 2018). However, the role and function of these practices are still underdeveloped, adopting the sustainability disclosure framework (Bebbington and Unerman, 2018; Annan-Diab and Molinari, 2017; Schaltegger *et al.*, 2017; Bebbington and Larrinaga, 2014; Bebbington *et al.*, 2014; Ishak *et al.*, 2010; Schaltegger and Wagner, 2006).

Thus, corresponding these studies with an integrated framework for sustainability accounting and reporting, we aim to outline the still existing gap in research and practice in identifying and implementing effective organisational, accounting and reporting practices, mostly reporting, to meet the SDGs, also illustrating the pre-conditions even unknown for making accounting and reporting helpful within firms in the perspective of the SDGs. In this direction, the paper aims to analyse the link between the SDGs Agenda and the organisational, accounting and reporting practices through the sustainability disclosure.

The following research questions are discussed:

Q1. Which organisational, accounting and reporting practices are adopted by airport infrastructures to meet the 17 SDGs Agenda?

Q2. What is the state of the Italian airport industry regarding the main practices adopted for achieving the SDGs 11 and 17 as shown by financial and non-financial disclosure?

The airport sector is chosen as context for our research because of the increasing and recognized environmental, social and economic impact of air transport. The growing and significant impact of this industry highlights the need to look for, develop and implement technical, organisational, accounting and reporting practices to meet the SDGs Agenda by 2030. Indeed, the aviation industry is one of the major sources of global warming and air pollution (Uysal and Sogut, 2017). Airports represent critical nodes in the connectivity of the air transport system and consequently play a relevant role in the contemporary socio-economies of aviation sector. The Italian context represents an interesting geographic area to analyse with concern of the 17 SDGs Agenda due to the still existing troubles in meeting these goals by this country as shown from the recent report, especially regarding the challenges faced by the most relevant industries in sustainably being and performing

(Istat, 2019). Otherwise, the Italian aviation industry has been recognized with a decisive role in the civil aviation sector reconfirming a key position among the leading aviation nations at the 40th Assemblies ICAO with equal merit with China (ENAC, 2019). Indeed, we observe the positive trend of air traffic growth in Italy in the last years, indeed, in 2018 passengers increased by 5.8% compared to the previous year and were about 184,810,849. The main airport is confirmed as that of Rome Fiumicino, which recorded almost 43 million, with a growth of 5% and with a share of 23.2% of total traffic. The commercial traffic in goods has been also increased in the Italian airports (ENAC, 2019).

To achieve the aim described above, we investigated the Italian airports, which we have chosen as our country context for the qualitative study for two main reasons. First, the Italian airports have relevant strategic roles and core positions within the Trans-European Transport Networks (TEN-T). Second, this airport industry has been significantly changed due to recent reforms which shifted much attention towards collaboration and partnership issues, as well as in the direction of sustainability issues. Indeed, these airports can significantly impact the community and individuals, and need to be engaged in educating and engaging the local community with regard to sustainability. We focus on SDG 11 and 17 for four main reasons. First, we consider these two goals together because of their strong link, also according to previous studies on the 2030 SDGs Agenda (Avrampou *et al.*, 2018; Kumar *et al.*, 2016), which categorise these goals in the cluster three (SDGs 11-17) concerning urban sustainability¹. Second, these two goals (SDG 11 “Make cities and human settlements inclusive, safe, resilient and sustainable” and SDG 17 “Revitalize the global partnership for sustainable development”), which respectively concern “sustainable cities and communities” and “partnerships for the goals”, and are significantly connected and achievable mostly thanks to global partnerships (Anwar *et al.*, 2017; Mahoney *et al.*, 2009; Utting and Zammit, 2009). Third, infrastructure, although is clearly related to SDG 9 (“Build resilient infrastructure, promote sustainable industrialization and foster innovation” – Industries, Innovation and Infrastructure), in relation to airport industry, presents a high impact on the city and community, and plays a crucial role in meeting the same SDGs through global effective partnerships. Finally, although both goals are relevant for the 2030 SDGs Agenda considering the role of infrastructure, they are not widely or significantly analysed together within airports. We conducted a broad review of the literature, including the airport industry, by systematizing and evidencing the main research

¹ Kumar and colleagues (2016), as reported by Avrampou and colleagues (2019), distinguish the 17 SDGs goals into three categories: cluster one with SDGs 1–7 which include the extension of the millennium development goals (MDGs) for 2030; cluster two on social inclusiveness (SDGs 8–10); and cluster three (SDGs 11–17) on urban sustainability, that is sustainability and urbanization including the last seven goals.

orientation and focus of scholars and prevalent practitioners' view to provide a clear picture in the gap between research and practice. Using the sustainability disclosure framework, this paper investigates if and how the airport industry is able to achieve the 17 SDGs. In particular, through a manual content analysis on financial statements and non-financial reports (sustainability and social reporting) of seven main strategic airport infrastructures, we outline the initiatives adopted to meet the SDGs 11 and 17. This secondary data analysis allows us to establish a status quo of the main Italian airports' achievement of SDGs goals, and their sustainable performance (sustainable behavioural models) outlining the main organisational, accounting and reporting practices developed and applied towards meeting the SDGs.

The findings of this research highlight the following main features: to reinforce the importance of initiatives for achieving the SDGs; to develop more adequate strategic plans and sustainability indicators; to effectively measure the sustainability performance and completion of sustainability reports.

The remainder of the article is structured as follows. In Section 2, a brief review of the main contributions in the literature and practice is presented to clearly explain the role and application of organisational, accounting and reporting practices to meet the SDGs by outlining the existing gap in the frame of sustainability disclosure. In sub-section 2.1. the SDGs Agenda and sustainability disclosure in the airport industry are shown. Section 3 describes the applied methodology focusing on qualitative study. Section 4 provides a portrait of the major strategic Italian airports investigated. In sub-sections 4.1. the findings of the study are summarized. Section 5 explains the theoretical and managerial implications of the study. Finally, Section 6 provides concluding comments, limitations and future perspectives of the study.

2. The organisational, accounting and reporting practices for meeting the SDGs through sustainability disclosure

The 17 SDGs Agenda incites all 193 UN Member States to develop actions crucial for humanity by 2030 (United Nations, 2016). Each of the 17 SDGs were developed considering the three principal components of SD, i.e., social, economic and environmental dimensions (Glavič and Lukman, 2007; Quak and De Koster, 2007), which is named the "triple bottom line" for sustainable development (SD) that emerged in the early '80s (Bebbington and Unerman, 2018; Elkington, 1994). Thus, the 2030 Sustainable Development Agenda integrates the three dimensions of SD around people, planet, prosperity, peace and partnership. Scholars and practitioners tend to search for and develop organisational, accounting and reporting practices able to meet the SDGs Agenda. The social and environmental practices (SEPs) were recognised as effective organisational

practices, able to positively impact the entire society through the improvement of the firm's impact on social and natural environments (Ortiz-de-Mandojana and Bansal, 2016). These organisational practices concern diversity, human rights, community relations, employee relations, product quality and safety, and also corporate governance practices (Ortiz-de-Mandojana and Bansal, 2016; Gao and Bansal, 2013). In addition, past research has focused primarily on sustainability accounting and reporting according to the SDGs.

According to previous contributions in research and practice (Bebbington and Unerman, 2018; Unerman *et al.*, 2018; PwC, 2018), a few SDGs have been most often mentioned by the companies in their reporting (corporate and sustainability report). Indeed, the top five priorities for business as identified in the recent report by PwC (2018: 14), were the following SDGs: SDG 8 (Decent Work and Economic Growth SDG 8), SDG 13 (Climate Action), SDG 12 (Responsible Consumption and Production), SDG 3 (Good Health and Wellbeing), and SDG 9 (Industry, Innovation and Infrastructure). According to the global SDGs Agenda, only some SDGs in the business sector have been investigated and developed in terms of their achievement.

In brief, a sustainability orientation requires two major changes to business-as-usual accounting and reporting research. First, it is necessary to focus on concrete problems rather than the interests of scholars, as well as include the viewpoints of practitioners. The sustainability presents a special interdisciplinary characteristic. Second, the research area of sustainability science is also transdisciplinary. These two characteristics fit well with the problem to meet the SDGs as well as reflecting the engaged processes that led to the development of the same goals (Bebbington and Larrinaga, 2014).

Only a few companies were able to identify the tools needed to assess their impact according to the SDGs (PwC, 2015, 2018). This existing gap between the number of firms committed to the SDGs and the number of organizations who identified how to assess their performance meeting the SDGs highlights the necessity to develop and introduce new forms of accounting and reporting interventions in this direction (Bebbington and Unerman, 2018; Wilson, 2017). Additionally, other related studies focused on sustainability, published prior to the SDGs Agenda, already emphasized the difficulty to define and implement practices, especially regarding the effects of the dominant, corporate-focused, sustainability discourse (Busco *et al.*, 2018: 2019). For a marked period of time, sustainability accounting and reporting practices were negatively evaluated in representing the cumulative effects of an organizations' activities on the environment and society because of their nature which was still mainly organization-centred, without significantly considering the combination between information and social and environmental impact, and also because of the limited scope (O'Dwyer *et al.*, 2005; Gray and Milne, 2002). Considering the role and function of

“discourses” for better achieving the SDGs, integrated reports were emphasized by using different genres and texts, they can perform a social function overcoming the basic responsibility (Zappettini and Unerman, 2016). Further studies summarised that sustainability accounting and reporting practices do not really represent the actual facts and managerial actions, but they often simply represent past episodes of weak sustainability initiatives (Milne and Gray, 2013; Gray, 2010; Gond *et al.*, 2009). This was done by deflecting, obfuscating, and altering information on social and environmental performance (Cho *et al.*, 2015; Cho *et al.*, 2010; Burritt and Schaltegger, 2010; Hopwood, 2009; Gond *et al.*, 2009; O’Dwyer *et al.*, 2005; Laine, 2005).

Most scholars argue that with regard to accounting and reporting practices for SD it is necessary to reduce “the gap between what companies actually do and what they say about it” (Busco *et al.*, 2018: 2221). Some authors argue that this gap does not have distortive effects (Christensen *et al.*, 2015). Furthermore, some studies explore the contributions of accountants to organisational sustainability initiatives (Egan and Tweedie, 2018), or the potential of sustainability reporting for bringing about change within organizations (Adams and McNicholas, 2007). Further studies empirically show that managers’ attitudes towards sustainability reporting, belief about stakeholder pressure, and their capacity to control sustainability behaviour, can affect their intention to engage in sustainability report and, indirectly, actual corporate sustainability reporting behaviour of listed companies (Thoradeniya *et al.*, 2015).

Likewise, scholars and practitioners debate whether organizations can play a relevant role in advancing the Sustainable Development Agenda, through the integration of SDGs into their strategies and operations and developing innovative solutions to face the global sustainable development challenges (Rosati and Faria, 2019a; United Nations Global Compact, 2018a). Among these several new solutions (organisational resilience, training and educational, information technology, accounting systems, etc.) to address the SDGs Agenda, all the organizations adopt several actions, such as reporting, on which we focus our attention in the qualitative research. According to previous contributions, sustainability reporting has been recognised as the practice through which organizations publicly report their economic, environmental and/or social sustainability impact (Rosati and Faria, 2019a; Global Reporting Initiative, 2016). Also, as Rosati and Faria (2019a) outlined in their study focused on sustainability reporting, SDG reporting can be conceived as the practice regarding the method used by organizations to publicly report about how they address the SDGs (Global Reporting Initiative, 2018a; United Nations Global Compact, 2018b). Sustainability reporting initiatives have been considered as helpful and effective actions able to align organizations and their business, thus capital market signals, with SD and consequently make responsible investments in the SDGs (Gugler, 2015; United Nations Conference on Trade and

Development, 2014, p. 162). SDG reporting plays a relevant role in allowing organizations to create the right link with all stakeholders and the entire community through an opened and clear external and internal communication process about their sustainable performance in meeting the SDGs Agenda.

In this scenario, the SDGs Goals 11 and 17 have received less attention especially considering the accounting and reporting perspective. The primary focus of SDG 11 is to create cities which are inclusive, safe, resilient, and sustainable. Indeed, numerous cities worldwide are facing many difficult challenges particularly in managing changes such as rapid urbanization and the negative environmental impact of urban sprawl in order to reduce the vulnerability to disasters. Although the issues related to SDG 11 are evident, scholars and practitioners do not pay attention to this goal when compared to others. For instance, many firms' strategies minimize this goal in correlation to the community when respecting and actively participating in waste management and air pollution policies. SDG 17 aims to strengthen the means of implementing and revitalizing Global Partnerships in the context of SD in order to support and achieve the ambitious targets of the 2030 Agenda, by creating a vast network which brings together national governments, the international community, civil society, private organizations, and other influences.

2.2. The SDGs in the airport industry through the sustainability reporting

Some scholars and practitioners, prior to the 17 SDGs Agenda, already paid attention to sustainable development in the air transport industry, but the focus has been mostly on the airline companies, for which a few specific topics, such as the Corporate Social Responsibility (CSR) of the airline companies has become important (Unerman *et al.*, 2018; Kuo *et al.*, 2016; Cowper-Smith and de Grosbois, 2013; Lee and Park, 2010; Bebbington *et al.*, 2009; Tsai and Hsu, 2008). Attention was paid by some scholars by exploring the boundaries of CSR reporting and presenting a conceptual analysis of boundary definitions and an empirical analysis of boundary construction in practice by coding reporting content of 35 airline companies (Ringham and Miles, 2018). Other scholars suggested that CSR reporting has positive impacts, including improving corporate reputation, boosting employee trust, and enhancing customers' satisfaction. They showed interesting results by collecting data through survey and conducting interviews evidencing that the respondents believe that government is the most important reader (or customer) of CSR reports, and CSR reporting's major motivations are related to reputation and brand value, employees' CSR awareness, communication with stakeholders, management systems, management culture, market share, and transparency with the government (Kuo *et al.*, 2016).

Some scholars have also investigated the environmental impact of the airline companies. The bird strike damage on aircrafts, for instance, is a widely studied matter due to its high economic impact on stakeholders' finances, by adopting different perspectives, such as the mathematics and nonlinear sciences, and for providing the foundations of the ontological knowledge for falconry performance as a Wildlife Control Technique for airport facilities in the Spanish civil aviation industry (González *et al.*, 2016). The general risks for aircrafts related to birds have also been analysed (Ning and Heng, 2014; Kitowski *et al.*, 2011; Cook *et al.*, 2008). Other scholars examined the small regional airport sustainability questions to determine whether such airports could be structured, managed and possibly financially supported in order to survive efficiently. This was done by applying data envelopment analysis to data from 85 European regional airports and estimating their potential savings and revenue opportunities, and to find the reasons for poor performance. This included discretionary variables such as the failure to search for commercial opportunities or to produce ground-handling and fuelling activities in-house (Adler *et al.*, 2013). Other scholars focused their attention on energy conservation, specifically energy efficiency in terms of excessive consumption of energy and CO₂ emissions at international airports in several countries (Chao *et al.*, 2017).

Also, Energy Management (EM) has become crucial and much more complicated for airports after introducing various energy sources, technologies and different comfort requirements. More specifically, Energy Management Information Systems (EMIS) for airports represent domain-specific solutions, platform-dependent and away from suggesting complete solutions and architectures (Uysal and Sogut, 2017). In a study by Uysal and Sogut (2017), a holistic and integrated approach was adopted for EM in airports and the notion of sustainability was adopted using the Enterprise Architecture (EA)-based EM, combining a two-faced research study, Action Research (AR) and Design Science Research (DSR) methodologies. To achieve environmental sustainability of airports, Giustozzi and colleagues (2012) argued that the design and construction of airfield tarmacs have to be consistent with strict requirements and constraints and also higher safety standards due to their particular setting. In an Italian based case study they proposed construction techniques and innovative materials designed to achieve environmental sustainability on airfield tarmacs.

In addition, a strategic and integrated approach was proposed to define the airport infrastructure design to comply with specific sustainability requirements, by adopting Green Airport Design Evaluation (GrADE) methods and tools to improve airport infrastructure planning (Ferrulli, 2016). With reference to airport corporate sustainability, by comparing the 10 best International airports through passengers' surveys, other authors concluded that the indicators, developed through the GRI

guidelines, for the sustainability of airport management needed to emphasize awareness of airport sustainability among all stakeholders (Koç and Durmaz, 2015). Instead, analysing specifically the environmental policies, Grigg and Howarth (2017) investigated the main airports in the UK through three major statements (conceived as relational entities, including documents, speech discourses, etc.), like the impact of airport expansion on environmental issues. Lu and colleagues (2018) argued that the Sustainability Balance Scorecard (SBSC) can be recognized as a very effective technique in evaluating the performance of international airports to ensure sustainable development.

Although researchers and practitioners show an increasing interest regarding sustainability within the context of airports, these studies are still scarce, and also do not specifically focus on the SDGs Agenda, also adopting the sustainability disclosure framework (Giustozzi *et al.*, 2012; Adler *et al.*, 2013; Monsalud *et al.*, 2014; Koc and Durmaz, 2015; de Santoli *et al.*, 2015; Baldarelli, 2016; Seitawian *et al.*, 2018). Some scholars outlined the need and relevance to adopt sustainability practices but they still do not link these initiative to the SDGs Agenda, as well as sustainability reporting, started in the 1970's with social reporting, in the frame of sustainability disclosure, has been recognised crucial for this industry for improving the way to give account of its activities to all the stakeholders and the overall community (Koc and Durmaz, 2015).

In the service industry, within the airport setting, the main SDGs which can be improved, considering the nature and the core activity of the same firms, are the SDGs goals 11 and 17, also require major attention in the monitoring and control systems, sustainability accounting, and reporting for SDGs.

In summary, the airport industry represents an interesting context where the achievement of SDGs is still under researched in both literature and practice especially with concern of financial and non-financial disclosure, in the perspective of sustainability disclosure framework.

3. Methodology: The portrait of Italian Airports

A qualitative research was conducted to establish the status quo in achieving the SDGs, especially the SDGs 11 and 17, in the Italian airport organizations outlining which organisational, accounting and reporting solutions have been adopted.

The SDGs adoption by Italian airports in terms of SDGs in financial statements and non-financial reports was established by using the integrative scheme developed according to the studies previously conducted in other economic sectors on SD (Bebbington and Unerman, 2018; PwC, 2018; Unerman *et al.*, 2018; Unerman, 2011; Bebbington *et al.*, 2009; Schaltegger and Wagner, 2006).

We exclusively selected the airports considered by the Italian regulation (see D.P.R. 17 September 2015, no. 201) as strategic for their location, size and traffic volume (passengers and goods), and their core position in the Trans-European Transport Networks in Europe (Infrastructure - TEN-T - Connecting Europe).

According to the regulation on the Italian Airport organizational system (D.P.R. 17 September 2015, no. 201; Code of Navigation, 2018, art. 698), we selected seven Italian airports responding to the following criteria: they are located in the specific geographic supra-area in the NUTS-Level 1 Schema (North-West, North-East, Center, South, Sardinia and Sicily Islands); they are airports of national interest, as essential nodes for the exercise of the exclusive power of the Italian State, taking into account the size and the type of traffic, and the territorial location; they are airports with strategic role; they are core airports (crucial node) in the European TEN-T Network.

Responding to these criteria described above, the seven airports selected of the sample are: the airport of Cagliari (Sardinia), Milan Malpensa (North-West), Naples (Campania), Palermo (Western Sicily), Rome Fiumicino (Centre), Turin (North-West), and Venice (North-East).

The empirical analysis of the selected Italian airports was conducted using the following steps: first, we analysed the website of each airport identifying the content and type of information provided in terms of sustainable performance, mission and vision according to the SDGs 11 and 17. Secondly, three specific information areas, which were sustainability, finance and governance, were examined for collecting reports and official documents (financial statements and non-financial reports have been taken into account). We then used “key words” within the financial and non-financial documents which were “sustainable development”, “sustainable development goal”, “SDGs”, “environment”, “environmental sustainability”, “environmental performance”, as well as “community”, “collaboration”, “partnership”, “cities” (these last words were chosen because of the specific topics related to the SDGs 11 and 17). After identifying the specific key words, we conducted a manual content analysis looking for all the characteristics of the documents (totally 42 documents) in terms of the language style and content of communication (specific words and sentences used) adopted by the airports.

The official financial and non-financial documents of the airports, collected through an internet search (reports, documents, archival data, and so forth), were analysed and allowed us to categorize the airports that took into consideration some specific dimensions, i.e., the presence of SDGs in sustainable reports and financial reports in the last three years (2016-2017-2018), the existence of plans and reports about SDGs (e.g., SDGs policy, the publication of an environmental report, the publication of a sustainable report, the application of sustainable policies, and so forth).

The manual content analysis of annual reports (over 3-year period financial statements and non-financial reports) is a very common research technique used for gathering data, after which we were able to codify qualitative and quantitative information into pre-defined categories. The content analysis, which has been broadly used in the accounting and reporting research literature, especially for investigating social and environmental disclosures (Milne and Adler, 1999; Guthrie and Parker, 1990; Eghal and Ahmed, 1990). This methodology in the current study allows us to better capture the extent and volume of non-financial disclosures (Beck *et al.*, 2010; Lajili and Zéghal, 2005). In the literature, with regard to disclosure and reporting debate, using words, sentences or portions of pages represents the basis for the coding as unit of analysis, where the sentences are preferred (Gray *et al.*, 1995). Using manual content analysis we have classified text units into categories, that is we went through the overall sustainability reports and disclosures sources collected looking at the specific 17 SDGs Agenda and organizational, accounting and reporting practices adopted in order to identify to outline if and how the airports investigated meet the SDGs, mostly the SDG 11 and 17. In particular, we outline the initiatives implemented for meeting the SDGs through the documents examined. In more detail, we analyse and evaluate narratives in annual sustainability reports through content analysis human-coded (Beattie *et al.*, 2004; Smith and Taffler, 1999). In our study we adopt the “meaning orientated” (subjective) analysis approach (based on thematic content) to content analysis, because we focus on the analysis of the underlying themes in the texts under investigation (Krippendorff, 1980: 63), compared to form orientated (based on word occurrences) (Weber, 1990). The “meaning orientated” approach allows us, identifying the thematic units through users’ judgment, to convey the hidden messages in the narratives (Smith and Taffler, 2000). Thus, we analyse as narratives (expressed in thematic units) voluntary and mandatory disclosures contained in the cruise companies annual reports, including all the sections, summary tables and notes, also considering related documents published on the websites, looking at and classifying them for their meaning related to the topics under research.

Regarding the manual content analysis of the overall documentation collected, both authors directly contributed to this section. Indeed, both authors, using their higher task interdependence, worked separately on this section, strictly going through each document and analyse in depth it evidencing the key points related to the research aim, and then they compared their results. In this case, the analysis of the documentation made separately and then compared can have higher level of validity. In more detail, we analysed accounting reports, including financial statements (annual balance sheet, statement of cash flows, and a number of disclosures that support and clearly explain the financial statements), and non-financial reports (the disclosure of a firms’ social, environmental and

human rights information, also known as Environmental, Social and Governance information - ESG).

4. Sustainable development in the SDGs 11 and 17: The current reporting status of Italian airports

The Italian airport system has been recently redesigned by adopting a different organizational model (D.P.R. n. 201/2015), which provides a new design for the overall airport system, with the identification and categorization of strategic airports compared to airports with national interest. Therefore, specific roles and functions were distinguished, also in terms of their performance standards taking into account their presence in the European core network². According to the Code of Navigation in Italy (Codice della Navigazione, 2018, art. 698), the current regulation identifies airports and airport systems of national interest, which are essential nodes for the exercise of the exclusive powers of the Italian State, considering the size and the type of traffic, the territorial location and the strategic role of the same airports, as well as the standards reported by the European TEN projects.

This rules system is in accordance with the regulations within the European Union (EU) regarding the Trans-European Transport Network (TEN-T network, Regulations No. 1315 and 1316/2013) recognizing the relevance of airports for being “core nodes” of the TEN-T network. Starting from the organizational setup of Italian airports, the status of the Italian airports briefly provides information on the sustainable models of the selected airports. The following dimensions have been investigated in terms of existing specific documents: the sustainable report (SR), the sustainable policy (SP)], and the contents about the SDGs 11 and 17 .

4.1. Findings

The results highlight that the seven selected airports have adopted a sustainability policy, although not all of the airports publish sustainability reports, and their financial statements do not directly provide significant data and information to initiatives implemented for meeting the SDG 11 and 17. More specifically, four airports provided the non-financial reports: Milan and Venice airports presented the non-financial reports for each analysed year (2015, 2016 and 2017), compared to Naples with non-financial reports for only two years (2016 and 2017), and Turin with one report (2017). The other airports (Cagliari, Rome Fiumicino, and Palermo) did not provide any non-

² The Italian airport infrastructures, although they present a public organization, are managed through the concessionaire agreement, that is specific organizations, named concessionaires usually private, plan and manage the airport infrastructures.

financial reports (See Table 1 for a summary).

 INSERT TABLE 1 ABOUT HERE

The results show that Milan, Venice and Naples airports indirectly included information in their non-financial reports that we can associate to the content and in the direction of the implementation of SDGs goals 11 and 17. These firms do not explicitly refer to or mention these SDGs, they explain in the non-financial reports (e.g. sustainable reporting) the strategy, the mission and the future behaviour of the firm towards sustainable cities and communities (SDGs goal 11), the partnerships for the goals (SDGs goal 17), and other SDG goals.

For instance, the 2017 Naples airport non-financial report shows a collaborative orientation with regard to the overall airports network and the local area. Thus, the adoption of a specific integrated platform and the proactive strategy focused on the local economy achieving two objectives through reporting practices: To support the airports and share crucial information on flights in using the infrastructures with relevant positive effects in terms of sustainability; to create synergies with local institutions making and adopting decisions strategically relevant for the development of the entire community and territory. In this case, a step towards the airport sustainable performance according to the SDGs has been achieved through collaboration and integration between all relevant players by strengthening global partnerships in the direction of the 2030 Agenda (SDGs 17), and also through an integrated strategy by promoting the region in the perspective of an inclusive, safe, resilient and sustainable cities and local community (SDGs 11)(For details see Appendix).

Moreover, the results also show that mostly in 2017 the transition from theory to practice in achieving the SDGs investigated has occurred for all the airports, except for the Cagliari (Sardinia) and Palermo (Western Sicily) airports. Their published reports do not provide information on their sustainable performance in the direction of SDGs goals 11 and 17. The manual content analysis of documents published from airports showed that only one airport, Rome Fiumicino, explicitly refers to the SDGs even though it does not produce sustainability reports. For example, in 2017, the Rome Fiumicino airport report, focused on operating management with explanations about the financial statement, outlines that since 2011 the airport joined Airport Carbon Accreditation (ACA) of ACI Europe (Airports Council International) adopting specific measures able to reduce air pollution according to the SDGs (For details see Appendix).

Thus, the Fiumicino airport in Rome, although non-financial reports are missing, shows an increasing attention paid to the 2030 SDGs Agenda, comments in the document regarding the financial and operating management, the airport points out the adoption of the most recent

initiatives to reduce CO₂ emissions in the direction of the SDGs, specifically achieving the SDG 13 Climate Action, taking fundamental actions for combating the climate change and its negative impacts on human health. Thus, the airport aims to sustainable perform that we can read in general in the perspective of the 2030 SDGs Agenda focusing on environmental sustainability development.

The Milan Malpensa airport in its sustainability reports analysed for all the three years shows an increasing attention versus the SDG 11. Indeed, this airport promotes and is involved in numerous initiatives addressed to improve the relationship with the entire community, such as the promotion and adoption of the SEA's sustainability governance model and, also, the Corporate Citizenship Policy, as well as through the numerous donations provided by the airport with consistent investments for cultural and educational activities, sporting events and social/welfare issues. Regarding the SDG 17 it is possible to read some sections of the reports of Milan airport in this direction, for instance, the 2017 report outlines the interesting initiative "KadAfrica", consisting of partnership with other organisations also at international level for promoting and implementing specific actions to support drink & food distribution and educational services.

INSERT TABLES 2-5 ABOUT HERE

In summary, the lack of specific and direct details and information related to the SDGs Agenda, mostly the SDGs 11 and 17, in the financial and non-financial reports, does not mean that the airports do not include sustainability in their strategic and operating management. Indeed, other documents, such as environmental policy reports, environmental certifications, environmental management systems (EMS), and so forth, often fill the gap of the financial and not-financial reports. Hence, although organizations do not explicitly mention the SDGs in their financial and non-financial reports, there could still be a strong connection to sustainable issues, especially for developing partnerships (SDG 17) and making the cities and communities inclusive, safe and sustainable (SDGs 11). This study outlines the need to better incorporate the 2030 SDGs Agenda introduced in 2015. More time is needed for firms to be involved and committed in SDGs and to acquire awareness about these ambitious goals and how to achieve them.

5. Practical and managerial implications

Academics and managers should consider the results of this study in order to improve the financial disclosure and, above all, non-financial disclosure. In this direction, for academic researchers it is

possible to create a starting point to analyse this phenomenon, the SDGs framework, for the airport industry, highlighting the best practices in terms of sustainability accounting and reporting for achieving the United Nations SDGs. This study might help practitioners to categorise the content of the financial and non-financial disclosure by improving the quality of disclosure on SDGs.

Therefore, our study shows that reporting can be recognised as an accounting tool which allows both to know what companies really do and to rethink and reflect about the strategies and organizational practices needed to be adopted. In this direction, much attention is required to training and educational programs, also for meeting the related specific SDG.

This study shows that firms, although they tend to follow the SD approach and the SDGs framework, are still not ready and do not fully understand the framework lacking in being trained and engaged about this new era characterized by the SDGs model. Thus, we conclude an urgent need for firms to improve their knowledge in order to be more effective in defining and implementing their sustainability accounting and reporting practices. In this direction, confirming some previous studies on the topic, educational and training programs need to be developed and applied, specifically to make the sustainability accounting and reporting practices more useful and for giving the required skills and knowledge to accounting and reporting professionals (Egan, 2018; McGrath and Powell, 2016; Bebbington, 1997).

Likewise, this study illustrates the need to not neglect some organisational practices able to activate the organisational change required within firms to meet the SDGs (Rosati and Faria, 2019; Cormier, 2018; Ortiz-de-Mandojana and Bansal, 2016). For instance, the adoption of educational and training programs within firms, as well as, the promotion of high educational programs by professionals and business schools, can allow the employees at any organizational level to be both involved and to acquire professional skills and knowledge to sustainably behave according to the SDGs (Allen *et al.*, 2018; Nazar *et al.*, 2018; Chowdhury and Koya, 2017). Likewise, adopting a multidisciplinary approach in which different areas are considered has been emphasized, i.e. accounting and reporting together with the typical areas of management or engineering. For example, many advantages derived from the targeted interventions of engineers in the research and construction of sustainable aircraft, looking at the environmental and economic aspects assessed and measured thanks to accounting and reporting professionals.

This study presents some interesting implications for managers, investors, and decision makers, showing the need to adopt a participatory, cooperation, and collaboration orientation model where all the organisations can think and develop strategies and policies adopting the same sustainability orientation, including the internal and communication process through reporting, especially in the direction of the SDGs 11 and 17. In this case, all organisations should take into account some

specific factors, like institutional factors related to the country, which play a relevant role affecting the design of country strategies, investments, and policies able to support and meet the SDGs and, especially the SDG reporting (Rosati and Faria, 2019; Halkos and Skouloudis, 2016; GRI, 2016; United Nations Global Compact, 2018a, 2018b; Waage *et al.*, 2015; Jensen and Berg, 2012). As well these specific factors also have a large impact on other stakeholders, including citizens, educators, scholars, institutions, which need to be committed for the achievement of the SDGs (Giannetti *et al.*, 2018).

Furthermore, according to previous studies (Bebbington and Unerman, 2018; Unerman *et al.*, 2018; PwC, 2018), several reasons can justify the superficial engagement shown by the investigated airports, that is: the firms still need to be trained and guided on how to measure positive and negative impacts of the SDGs in some key areas (outlining the link to the same SDGs and their targets) and about which effective initiatives to adopt; with concern to the reporting frameworks, companies also need more clarity on how to make the link between SDGs and established reporting frameworks and standards, by helping to compare data between firms. In this direction, the UNGC and the GRI have already identified the key actions and relevant business disclosures for each of the 169 SDG targets; with reference to sector collaboration, although actions at the sector level are really significant for meeting the SDGs, they are still slow to take off. For instance, the WBCSD created guidance for leading the CEOs to adopt best practices where firms work together to drive actions by creating sector roadmaps; about the government, the policy makers play a crucial role in this circumstance, but many firms still wait for effective guidance from government with adequate policies which could impact their investment decisions before operating. Unfortunately, many governments have other priorities and lack resources and expertise to engage with the business community for meeting the SDGs. In three years only 111 of the 193 UN Member States have produced reviews of their own national progress according to the 2030 Agenda (PwC, 2018).

6. Conclusions

This article, focused on Italian airports, aims to analyse whether these organizations adopt organisational, accounting and reporting practices to meet the SDGs through the reading and processing of financial and non-financial reports. Thus, we investigated these documents for outlining whether these firms mention the SDGs in their financial and non-financial reports, and specifically if their business strategy and operating activities meet the SDGs 11 and 17 pointing out which initiatives have been implemented.

Our study confirms the significant role of sustainability reporting which has been previously conceived by scholars and practitioners as an enabler of SDG actions, investments and strategies

(Rosati and Faria, 2019a, 2019b; Global Reporting Initiative, 2016a, 2016b), has become a relevant driver of an organisation's sustainability orientation (Lozano, 2015; Siebenhüner and Arnold, 2007). Hence, sustainability reporting can represent a practice action able to allow any organisation to measure, understand, drive, and communicate their SDG interventions, orienting their goals and business model to the overall sustainability framework (Rosati and Faria, 2019a, 2019b; Global Reporting Initiative, 2018b).

We also discovered that a few companies in the airport industry mention SDGs in their reports, confirming previous studies on the topic (Rosati and Faria, 2019b; Schramade, 2017). For instance, Schramade (2017) empirically stated that only a minority of companies tend to mention the SDGs in their reports having as key challenge the link between SDG with their implementation and specific incentives and related investments in the same SDGs. Also, Rosati and Faria (2019) in their sample (totally 408) proved that only 67 organizations (16%) addressed the SDGs in the sustainability reports published in 2016.

In addition, the findings of our study, confirming previous contributions on the topic (Rosati and Faria, 2019a, 2019b; Bebbington and Unerman, 2018; Unerman *et al.*, 2018; PwC, 2018), show that creating the scale of change necessary to achieve the SDGs Agenda requires something more complex than easily relabeling the existing efforts in compliance with the SDGs. Firms have to be responsible for their activities with negative impacts on the SDGs and must account for these operations and halt them making changes in their strategy. In this direction, firms also need to search for effective organisational practices for acquiring more awareness and being more involved in the SDGs framework, as well as in defining their strategy (Grainger-Brown and Malekpour, 2019; Nazar *et al.*, 2018; Ortiz-de-Mandojana and Bansal, 2016).

Although some firms studied do prioritize the SDGs, they do not analyse the goals in depth and consider the underlying targets. In addition, only very few firms go inside and provide more details in terms of effective key performance indicators (KPIs) for measuring their sustainable performance over time meeting the SDGs.

Meeting the SDGs using relevant KPIs can represent the most "important bridge between prioritising the Goals, embedding them into business strategy and action planning, and in turn produce better reporting. By setting targets and KPIs and establishing the link to the value created or destroyed for society as a whole, companies can demonstrate in their reporting how they are taking action towards the SDGs rather than just talking about them in a not specific way" (PwC, 2018: 30). In summary, it should be useful and profitable to develop more studies of firms engaged with the SDGs where accounting and reporting interventions might play a key role, also because they provide basic information to adopt the set of KPIs meeting the SDGs.

This study focused on sustainability reporting does not still consider some further interesting factors able to affect the effectiveness of reports for achieving the SDGs and the same implementation of SDGs framework. Indeed, it should be useful and newsworthy to investigate the link between SDG reporting and some relevant organizational factors, drawing from previous studies (Rosati and Faria, 2019b; Biermann *et al.*, 2017), especially the contribution by Rosati and Faria (2019b) who specifically focused on organizational variables, like size, level of intangible assets, commitment, gender equity in corporate boards, and cultural and country model, recognized as key elements able to affect and face the challenging adoption of the SDGs.

Appendix

The 2017 Naples airport non-financial report states:

“Since 2016 the Airport Collaborative Decision Making (A-CDM) system is an integrated platform that transmits real-time status information about all flights departing from EUROCONTROL (Network Management Operations Center) which in turn transfers them to other connected airports. Thus, it is possible to optimize the flow of air traffic, the airport management, the use of airport infrastructure and human resources, by increasing the flight punctuality and reducing fuel consumption and the negative environmental impact.”

“There is a strong link between the Airport of Naples and the development of Neapolitan and Campania tourism: in 2017 both the Airport of Naples and the local institutions have confirmed the positive trend recorded in previous years, testifying how an integrated strategy to promote the destination and development of the airport connections network can represent a mutual advantage for developing the tourism economy and beyond.

Four years ago, GESAC defined the new strategy for developing the Airport of Naples, starting from the analysis of the main opportunities. The Airport of Naples therefore set a specific goal consisting of actively contributing to enhance the Neapolitan tourism destination, promoting it, and achieving its enormous leading tourist destination in Europe, in the case of Naples for the city break segment.

In continuity with its strategy undertaken, in 2017 GESAC has continued its efforts to strengthen the capacity of the territory to attract as a tourist destination:

- *Network and traffic development and marketing policies aimed at attracting new airlines and opening new links with the national and international market basins, which are more interesting both in terms of incoming and outgoing;*
- *Promotion of the destination and communication program aimed at promoting the uniqueness of the attractions of the Naples destination which, since 2017, has assumed a more markedly cultural declination with the objective of de-seasonalizing the tourist flows: Naples, a city for 'year!*
- *Networking as an active and innovative role for the tourist development of the Naples destination and, more generally, of the Campania Region through a synergistic collaboration model that involves the operators of the tourism industry, from public institutions to trade associations, from the directions of the museums poles and archaeological sites to local mobility workers.”*

The 2017 Rome Fiumicino airport states in its report on operating management with explanations

about the financial statement including any operating areas:

“Since 2011 the airport joined the Airport Carbon Accreditation (ACA) of ACI Europe (Airports Council International), a certification system which provides four levels of accreditation (Mapping, Reduction, Optimization, Neutrality) addressed to reduce direct and indirect CO₂ emissions. In 2017 the Fiumicino airport preserves the ACA level of "Neutrality", offsetting the emissions direct and indirect 2016 (Scope 1 and 2) with the purchase of "carbon credits" from projects certified 'Gold Standard and Voluntary Carbon Standard', located in non-Annex1 countries of United Nations Framework Convention on Climate Change and with evidence of project contributions to the SDG (Sustainable Development Goals). In 2017 the airport replaced 15 car-pooling vehicles with hybrid vehicles, showing a deep change in the direction of environmental sustainability.”

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Declaration of interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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HIGHLIGHTS

- This paper analyses the 17 Sustainable Development Goals (SDGs) Agenda highlighting if and which organisational, accounting and reporting practices are adopted.
- Adopting the sustainability disclosure framework, we analyse how firms within the airport industry achieve the SDGs 11 and 17 showing the initiatives developed and implemented.
- Drawing from a review of the literature, this qualitative study provides a reading of the Italian airport infrastructures.
- The main Italian airport infrastructures investigated, although mention the SDGs in their financial and non-financial reporting, still don't completely meet the SDGs goals.
- This study outlines the need to create conditions for developing and better implementing the accounting and reporting practices for meeting the SDGs goals within firms supported by effective organisational practices.

Table 1 - The portrait of Italian Airport Infrastructures.

AIRPORT	SR (Y/N)	SP (Y/N)	SDGs GOAL 11			SDGs GOAL 17		
			2015	2016	2017	2015	2016	2017
Turin (North-Western)	Y [2017]	Y	-	-	Y	-	Y	Y
Milan Malpensa (North-Western)	Y [2015, 2016, 2017]	Y	Y	Y	Y	Y	Y	Y
Venice (North-East)	Y [2015, 2016, 2017]	Y	Y	Y	Y	Y	Y	Y
Rome Fiumicino (Centre)	N	Y	-	-	Y	-	-	Y
Cagliari (Sardinia)	N	Y	-	-	-	-	-	-
Naples (Campania)	Y [2016, 2017]	Y	-	Y	Y	-	Y	Y
Palermo (Western Sicily)	N	Y	-	-	-	-	-	-

Table 2 - Turin (North-Western) Sustainability Activities (2017).

SDGs	year 2017			
	INITIATIVES	QUOTES		
SDG 11: Sustainable Cities and Communities	<ul style="list-style-type: none"> -Culture and social cooperation -Collection system on noise complaints - "Aeroporto a Porte Aperte" (Open Doors Airport) 	<p><i>The presence of an airport produces different types of economic impact:</i></p> <ul style="list-style-type: none"> • <i>direct: that includes employment, income and added value generated by activities directly related to airport management;</i> • <i>indirect: through the entrepreneurial activities of the companies involved in the airport activities.</i> <p><i>Sustainability Vision</i> <i>SAGAT has placed the needs of the mobility of the city and the territory at the center of its work and, at the same time, has made the Airport an integral part of the development of the city and the region.</i> <i>Four areas of action on 2014-2017 contributed to the development:</i></p> <ul style="list-style-type: none"> • <i>expansion of the network;</i> • <i>improvement of the passenger experience;</i> • <i>collaborations with the territory to bring the best cultural experiences into the airport infrastructure and bring the Airport in direct contact with people on the occasion of the most important city events;</i> • <i>positive effects of the growth of the Airport on the community, in terms of employment, income and image of the territory.</i> 	<p><i>The planning of the territorial development of the towns near the airport is so crucial for the sustainable development (SD) of the airport. For this reason, SAGAT has paid great attention to the definition of "Airport Acoustic Zoning" (see Ministerial Decree 10/31/1997 on "Measurement method for airport noise" which is the main instrument of planning of territorial development compatible to the acoustic impact produced by aeronautical noise").</i></p> <p><i>Turin destination promotion: carried out in collaboration with the airlines to stimulate the incoming question and offer a range of possibilities always richer in the outgoing market.</i></p>	<p><i>Turin Airport promotes the development of its network and the initiatives carried out together with the partners through all the communication tools:</i></p> <ul style="list-style-type: none"> - <i>advertising campaigns for new flights (example, press releases and press conference).</i> - <i>digital PR activity, in collaboration with partners, to promote the Airport and its network to reach local events</i>
SDG 17: Partnerships for Goals	<ul style="list-style-type: none"> -Meetings with suppliers -ANAC agreement -Book exhibition (BABEL) -Car exhibition in Turin -Collisioni Festival -Sottodiciotto Film Festival -Tuttadritta and Turin Marathon 	<p><i>Turin Airport promotes the development of its network and the initiatives carried out together with the partners through all the communication tools:</i></p> <ul style="list-style-type: none"> - <i>advertising campaigns for new flights (example, press releases and press conference).</i> - <i>digital PR activity, in collaboration with partners, to promote the Airport and its network to reach local events</i> 	<p><i>SAGAT and the cultural, institutional and sports partners of the territory have been able to benefit from mutual visibility and achieve together numerous initiatives. This has been possible thanks to the over 15 collaboration agreements stipulated in 2017, and 10 conventions that include benefits for all employees.</i></p>	<p><i>Network for traffic development: agreements long-term commercial relationships with airlines to activate new destinations and intensify existing ones;</i></p> <p><i>Turin destination promotion: carried out in collaboration with the airlines to stimulate the incoming question and offer a range of possibilities always richer in the outgoing market.</i></p>

Source: Authors' processing on Turin (North-Western) Sustainability Report, 2017

Table 3 - Milan Malpensa (North-Western) Sustainability Activities (2015-2016-2017).

SDGs		year 2015			
		INITIATIVES		QUOTES	
SDG 11: Sustainable Cities and Communities	-SEA's sustainability governance model -Corporate Citizenship Policy -Donations: culture/education; sporting events; social/welfare	<i>LOCAL COMMUNITIES</i> Residence exposed to noise emissions Residence exposed to reduction of quality/ enjoyment of natural capital (air, soil, biodiversity, etc.)	<i>Social Citizenship</i> In 2012, we developed a Corporate Citizenship Policy. The statement was created to define social investment strategies that would be organic, effective and progressively related to the company's business profile. Social investments that have been made over the past four years have raised the awareness that our duty as a company is not limited to well managing our airports, but it also includes ability to build harmonious relationships: • with the surrounding area hosting our infrastructures; • with non-profit entities that try to give answers to the community around; • with people of SEA, not only in their role as employees, but also as citizens who, after clocking out for the day, also want to contribute to a good cause as an important part of their personal fulfilment	<i>Corporate Citizenship policy</i> We have defined a policy on "Corporate Citizenship", whose fundamentals are: • relevance of corporate citizenship is defined by the intensity of its connection with corporate strategy and not by the amount of resources employed; • corporate citizenship activities are carried out responding to the need to protect the rights of: - shareholders, in terms of the most correct, efficient and profitable use of the resources managed by company; - non-profit stakeholders, regarding the need for transparency and objectivity of criteria with which the company chooses partners for social investments; - the company itself, in terms of credibility and reputation regarding its ability to be transparent about mechanisms for accepting contribution requests from non-profit world.	
SDG 17: Partnerships for Goals	-SEA's sustainability governance model -2030 Master Plan for Malpensa -ARPA (Regional Environmental Protection Agency)	<i>Our Corporate Social Responsibility strategy aims to enhance relational dynamics between our organization and its stakeholders, thus becoming more than just recipients of a share of value generated by the company - true qualified contributors of the key strategic business choices having significant impact on the context they belong to. This goal is the rightest answer to the deep and delicate interdependencies of choices and decisions of companies such as SEA.</i>	<i>We work in partnership and under the strict control of ARPA (Regional Environmental Protection Agency) in order to improve monitoring and safeguarding of the area around our airports. Based on criteria defined in Guidelines of Lombardy Region, ARPA has classified as "Monitoring" 4 of 6 Linate stations and 10 of current 16 Malpensa stations.</i>		
SDGs		year 2016			
		INITIATIVES		QUOTES	
SDG 11: Sustainable Cities and Communities					
SDG 17: Partnerships for Goals	-Sustainable Development Governance -Assaeroporti- Italian Airport Operators Association -Assoclearance - Italian Association of Clearance and Slot Management -Assolombarda - National Association of Small, Medium and Large Enterprises ACI Europe - Airport Council International -IGI - Istituto Grandi Infrastrutture (Large Infrastructure Institute) -AIGI - Associazione Italiana Giuristi (Italian Association of Legal Experts) -ATAG Air Transport Action Group -UNIVA Varese - Association of companies that are part of the Confindustria System	<i>Assolombarda - National Association of Small, Medium and Large Enterprises with the aim of safeguarding the interests of its members in the relationship with external counterparts active in various areas, such as institutions, training, environment and territory, culture, economy, labour and civil society, providing a wide range of specialist services that contribute to the development of companies.</i>			
SDGs		year 2017			
		INITIATIVES		QUOTES	
SDG 11: Sustainable Cities and Communities	-The 2030 Linate Master Plan	<i>Catalytic impact</i> The definition of catalytic impact encompasses all the static and dynamic effects arising from the presence of an airport in terms of the attractiveness and the competitiveness of the area involved in its activity. By creating connectivity, the airport either triggers or amplifies socio-economic development mechanisms, boosting the economic growth of the region. <i>Direct employment impact of Malpensa on CUV municipalities (Voluntary Urban Committees).</i> The analysis of the regional employment distribution, directly due to Malpensa airport, shows that 79% of employees live in Lombardy, with over 6% residing in the neighboring province of Novara	<i>To establish how these dynamics translate into socio-economic impact variables that benefit the Lombardy region, a study was carried out on a panel of passengers disembarking in Malpensa, to establish their spending habits in the region, in terms of transport, hotels, restaurants, retail outlets, free time, entertainment and leisure: In 2017, 3,700 international passengers leaving Malpensa Terminal 1 or 2 and spending at least one night in Lombardy, were interviewed. Socio-environmental project implications</i> Over time, the individual components of Linate Airport have developed heterogeneously and not always under a fully coordinated vision. This means that certain	<i>Tourism Air access increases the number of inbound tourists to a country. This tourist spend supports a wide range of businesses: hotels, restaurants, shops, entertainment and leisure services, car hire, etc. The attraction and the retention of production investments in the territory. The presence of an international airport is a key factor for companies deciding to relocate their offices, production plants or warehouses. The Master Plan aims to further open the airport up to the city. Indeed, the reconfiguration of the intermodal node, as part of the subway works, represents an opportunity to enhance the continuity of the city's public spaces with a sequence of squares (e.g. of the M4 subway, of the terminal's ground floor and of the Idroscalo water park dock) from the Grande Forlanini park</i>	

		and almost 12% residing outside the region.	infrastructures, systems and facilities, in the passenger terminal and in various operational areas of the airport, have been rendered obsolete and no longer meet operational needs, due to the fact they are subject to continuous functional, technical and environmental developments in relation to the territory and passenger expectations, among other aspects.	to the Idroscalo park, connecting the airport and metropolitan subway line M4.
SDG 17: Partnerships for Goals	<ul style="list-style-type: none"> -KadAfrica -Digital platform (http://masterplanmxp2030.seamilano.eu) -Municipality of Pioltello -Municipality of Segrate -Municipality of Peschiera Borromeo -Private citizens -CeRst-LIUC (Centre for territorial research at Cattaneo University) 	<p>To date, KadAfrica is only involved in fresh products, but in the future, when fully operational, there are plans to expand its business by building a fruit pulp processing plant; fruit pulp is in demand by the drinks industry.</p> <p>The direct management of the in the production and the sale of seeds as well as the direct management of an agricultural investment fund.</p> <p>KadAfrica essentially operates in three business areas:</p> <ul style="list-style-type: none"> ☑☑ to support girls who had left school in securing an income; ☑☑ to help small farmers to access markets by grouping and selling their products; ☑☑ to process passion fruit (delivgirls' training programmes (previously managed in partnership with the local Caritas) resulted in various delays in terms of targets. <p>This greatly impacted the implementation timeframes for other planned activities (local farmers' programme, the production and sale of seeds, the launch of a proering added-value to the agricultural yield) and to expand revenue opportunities.</p> <p>The social impact indicators used to assess the project reference the three SDG parameters: SDG1 (eradication of poverty), SDG5 (gender parity), SDG8 (dignified work and economic growth).</p> <p>(production process on proprietary land), which should have been launched at the same time to diversify revenue streams.</p> <p>Our 6-year partnership with the CeRst-LIUC (Centre for territorial research at Cattaneo University) sought to measure more precisely and reliably the socio-economic externalities created by our Malpensa and Linate airports on various territorial scales. The goal, on the one hand, is to define the economic role of our airports within the Lombardy and national context and on the other, to support optimal methods of engaging with the region.</p>	<p>Stakeholder engagement In the redrafting of the Malpensa Master Plan we launched a cogent public consultation plan to involve the main stakeholders. The goal we set ourselves was to adopt structured dialogues with the actors in the region to understand how we could complement and not conflict with their demands for developing airport traffic.</p> <p>Directive 2014/52/EU regarding environmental impact assessments (transposal obligation into Member State legislation by May 2017) which implies early-stage public participation in the project's decision-making process, online access to information, consultations with the target audience of not less than 30 days, and careful consideration of their relevance to health impacts.</p> <p>MEETING</p> <p>We organized a series of workshops solely for the representatives of all interested stakeholders. Following an invitation from the interested administrations, we also took part in public discussions organized by entities and organizations present within the airport.</p> <p>DIALOGUE</p> <p>We launched a digital platform (http://masterplanmxp2030.seamilano.eu) whereby qualified stakeholders were able to acquire information and send us their opinions, proposals, analyses and assessments on the project guidelines.</p>	<p>A highly qualified team was put in place:</p> <ul style="list-style-type: none"> ☑☑ The Department of Earth Sciences and the Environment - University of Padua and the Department of Civil and Environmental Engineering - the Milan Polytechnic for water, soil and subsoil issues. ☑☑ The Department of Biology - University of Pisa; the Department of Sciences and the Environment, University of Padua; The Museum of Zoology and Natural History, best known as La Specola - University of Florence, for flora, fauna and eco-systems. ☑☑ The Department of Environmental Sciences and of the Region, University of Milan Bicocca, for atmosphere, noise and electromagnetic fields and light pollution. <p>Environmental impact assessment: specialist studies and competencies To carry out the specialist studies specifically on the environmental matrices, but not only for this purpose, a highly qualified team was put in place:</p> <ul style="list-style-type: none"> ☑☑ The Department of Earth Sciences and the Environment - University of Padua and the Department of Civil and Environmental Engineering - the Milan Polytechnic for water, soil and subsoil issues. ☑☑ The Department of Biology - University of Pisa; the Department of Sciences and the Environment, University of Padua; The Museum of Zoology and Natural History, best known as La Specola - University of Florence, for flora, fauna and eco-systems. ☑☑ The Department of Environmental Sciences and of the Region, University of Milan Bicocca, for atmosphere, noise and electromagnetic fields and light pollution. We also launched a specialist assessment on health implications, as well on the public health impacts, robustly following the regulatory framework established by the Lombardy region in this field. <p>We also used the CNR (Institute for Materials Technology and Energetic Processes) to structure and outline this extremely complex topic and track the primary considerations of the general methodological approach. Subsequently, we set up (still ongoing) a specialist unit including the Department of Clinical Sciences and the IRCCS Community Fondazione Ca' Grande of the University of Milan, which will liaise with the ATS (Health Service) and the Lombardy Region.</p>

Source: Authors' processing on Milan Malpensa (North-Western) Sustainability Report, 2015-2017

Table 4 - Venice (North-East) Sustainability Activities (2015-2016-2017).

SDGs	year 2015				
	INITIATIVES		QUOTES		
SDG 11: Sustainable Cities and Communities	-Noise and environment working team		<i>Involvement and sharing with the territory</i>		
SDG 17: Partnerships for Goals	-Lagardère group (see <i>Contratto di Programma</i>) -Ca' Foscari University (Venice) -Industrial Zone Organisation of Marghera port				
SDGs	year 2016				
	INITIATIVES		QUOTES		
SDG 11: Sustainable Cities and Communities	-Masterplan -Tavolo Territoriale -Venice Challenge Cup		<i>The SAVE Group manages the third Italian airport system and represents a strategic asset for the local economy and employment. The Venice airport plays an important role in the economic development of the region, because the management of airport activities generates a high economic value not only direct but also indirect and induced. The airport is no longer considered as a simple infrastructure but it is considered as a pole that attracts commercial activities and tourists flows. Therefore, the dual role (infrastructure and commercial node) creates positive and beneficial synergies for the local economy.</i>	<i>In order to intensify the dialogue with the territory, in 2014 SAVE established a Territorial Table with local associations and institutions. The meetings of the Territorial Table have as their objective the exchange of information and moments of confrontation on projects that will transform the Marco Polo Airport into an "airport city", that is, a coordinated set of services and reference pole. This transition will take place through a progressive path, planned on the basis of a Masterplan, an essential planning tool for a balanced and functional development. The meetings of the Territorial Table are aimed at identifying and sharing the mitigation / compensation interventions included in the Environmental Impact Study of the Venice Airport.</i>	<i>In 2016, the SAVE Group committed itself to supporting the territory and local communities by providing over 200 thousand Euros for cultural, sporting, social and research activities. The main activities in which SAVE invested were: for the culture and education category, the sponsorship of the 54th edition of the "Campiello", a literary award assigned to works of Italian fiction. The commitment of individual companies to support cultural activities is an increasingly important issue. Furthermore, the change in the relationship between public and private sectors and the scarcity of public resources for cultural heritage are factors that have contributed to intensifying relations between businesses and the world of culture. As regards sports events, the sponsorship of the Venice Challenge Cup organized by the Tc Mestre is noted.</i>
SDG 17: Partnerships for Goals	-Ca' Foscari University of Venice -Tavolo Territoriale				
SDGs	year 2017				
	INITIATIVES		QUOTES		
SDG 11: Sustainable Cities and Communities			<i>Since 2006, Venice Airport has equipped itself with a noise monitoring system for airport noise, fully compliant with the technical and structural specifications. The system has the purpose of monitoring, in the areas surrounding the airport, the noise impact generated by airport activities.</i>		
SDG 17: Partnerships for Goals					

Source: Authors' processing on Venice (North-East) Sustainability Report, 2015-2017.

Table 5 - Naples (Campania) Sustainability Activities (2016-2017).

SDGs	year 2016			
SDG 11: Sustainable Cities and Communities	<p>-#NaplesToday hashtag -#Airport initiatives: • Voia tra le Stelle. • S.L.O.T Creative Hub. • Aeroparte Aperte. • Re-Life, children's tech project. • Viaggio Legale. -#BeNAP -Archeological Airport -Jet2.com -Aci Europe Best Airport Awards</p>	<p><i>"The Airport that grows with and for the territory". This expression contains the meaning and role of Naples Airport with respect to the territory:</i></p> <ul style="list-style-type: none"> • The airport that grows the airport aims to grow not only because the development of airport activity is sustainable from a commercial, technical, social and environmental point of view, but also and above all because it is Airport development is an advantage for everyone; • ... with the territory the Airport grows in symbiosis with the community of reference, in the different expressions of the stakeholder, and with which it collaborates for the exploitation of opportunities and the constructive overcoming of issues; • ... for the territory the airport activity generates a positive impact for the territory (from the city of Naples, to the Region Campania, up to the whole of southern Italy) in terms of image, employment, income, tourism development. 	<p><i>For the promotion of Naples as a destination there are co-marketing campaigns in collaboration with the airlines (for example, the campaign for the 2016 summer season in collaboration with Jet2.com for the promotion of the Naples destination on the UK market).</i></p> <p><i>The initiatives to promote territorial artistic-cultural attractions carried out within the airport, such as "Archeological Airport" the first and only archaeological itinerary created inside an airport opened in March 2017. The project was born from the collaboration between G.E.S.A.C. and the Archaeological Superintendence of Campania to have the objective of contributing to enhancement of the archaeological and cultural heritage, while promoting the knowledge of the archaeological sites of Campania.</i></p> <p><i>The 2016 "Aci Europe Best Airport Awards" in the "5-10 million passengers" category concerns the improvement of the network of connections and the promotion strategy of the city of Naples as a tourist destination.</i></p> <p><i>NaplesToday is an innovative promotion project of Naples that tells the city through storytelling (story), dedicated posts, unpublished content and diffused photos online from the most famous international 'travel influencers'. The project aims to maximize attendance tourism, focusing on innovative promotion and effective 3.0 to make wealth known cultural and social heritage of Naples through social media network.</i></p>	<p><i>For the 2016 edition of the project, there are 4 international bloggers from Spain, Holland, England and France who were invited to spend a stay in Naples.</i></p> <p><i>With the #Naplestoday hashtag, bloggers have told us about wealth cultural and social in Naples, increasing its visibility among the reference communities in this case, not only in England and France, as in 2015, but also Spaniards and Dutch who represent the key markets for incoming tourism in the area.</i></p>
SDG 17: Partnerships for Goals	<p>-#Convention Bureau -Archeological Superintendence of Campania -Department of Culture and Tourism of the Municipality of Naples</p>	<p><i>G.E.S.A.C. is a promoter and founder of the Naples-CBN Convention Bureau, a network of private operators that represent the excellence of the Neapolitan Industry Meeting.</i></p> <p><i>The CBN aims to enhance the exclusivity of Naples as a MICE destination, thus promoting the destination for the organization of events, congresses, fairs and incentive trips of various kinds.</i></p>	<p><i>G.E.S.A.C. adopts a management policy that identifies in the comparison and in the collaboration with all the actors of the tourism chain a fundamental lever for the development of incoming tourism and for the development of airport traffic.</i></p>	
SDGs	year 2017			
	INITIATIVES		QUOTES	
SDG 11: Sustainable Cities and Communities	<p>-Stakeholder engagement instruments -#Aeroporto archeologico -Welcome Music Fest -Airport Tales -Aeroporto Porte Aperte "Black Saturday" -"Je sto vicino a te"</p>	<p><i>VISION OF SUSTAINABILITY</i></p> <p><i>The airport that grows with and for the territory This expression contains the meaning and role of Naples Airport with respect to the territory:</i></p> <ul style="list-style-type: none"> • the airport that grows the airport aims to grow not only because the development of airport activity is sustainable from a commercial, technical, social and environmental point of view, but also and above all because it is Airport development is an advantage for everyone; • ... with the territory the Airport grows in symbiosis with the community of reference, in the different expressions of the stakeholder, and with which it collaborates for the exploitation of opportunities and the constructive overcoming of issues; <p><i>The driving force behind this virtuous circle is the approach to integrated sustainability economic-competitive, social and environmental, which translates into objectives of:</i></p>	<p><i>Naples airport is present in social, civic and cultural life of the city. And it is in this perspective that also in 2017 the AdN became a promoter of various initiatives both hosted at the terminal, both at the nodes of the partnership network that is becoming more and more extended; between these:</i></p> <ul style="list-style-type: none"> • Archeological Airport, in March 2017 the first itinerary was inaugurated permanent archaeological site inside of an airport with works, some originals and other certified copies, masses available from the Archaeological Museum National of Naples and the Archaeological Museum of Capua; • Welcome Music Fest, musical review welcome to Naples to passengers and tourists in transit made in two editions, one at the airport, the other at Port of Naples in collaboration with the Port Authority; • Airport Tales, the literary competition dedicated to the interpretation of the airport as a narrative space and story generator that provides the publication of the best stories 	

		<ul style="list-style-type: none"> • promotion and enhancement of the territory as a tourist destination • quality and excellence of the experience of the passenger • enhancement and involvement of people involved in airport activities • protection and respect for the environment • community engagement • contribution to socio-economic development of the territory 	<p>selected by the jury of experts:</p> <ul style="list-style-type: none"> • "Black Saturday" Open Airport an airport opening night to devote to shopping and music with the participation of emerging artists; • "Je sto vicino a te", an initiative hosted at the airport that featured Pino Daniele's music for fundraising in favor of the Santobono Pediatric Hospital. 	
SDG 17: Partnerships for Goals	<ul style="list-style-type: none"> -Mann (National Archaeological Museum of Naples) -Campania CRBC (partnership with Ministry of Cultural Heritage and Activities and Campania region) -Airport Carbon Accreditation (ACA) 	<p>Networking with an active and innovative role for the tourist development of the Naples destination and, more generally, of the Campania region through a synergistic collaboration model that involves the operators of the supply chain tourism, from public institutions to trade associations, from the direction of the museum poles and archaeological sites to local mobility operators.</p>		

Source: Authors' processing on Naples (Campania) Sustainability Report, 2016-2017.

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