



Article How Do Universities in Türkiye Integrate Sustainable Development Goals into Their Strategies?

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Abstract: The strategic plans of universities have an important role in enabling HEIs to contribute to sustainability transitions. To address the current lack of studies in HEIs in Türkiye, this paper aims to determine how universities in Türkiye integrate sustainable development goals (SDGs) into their strategic plans to indicate the extent to which these universities align with the 17 SDGs and to discuss the visibility of SDGs in strategies. The research has been designed as a qualitative study involving document analysis. QS World University Rankings or being a research university are the two criteria for the sampling. The scope of the study consists of 27 universities, representing 13.4% of the universities in Türkiye. The most striking result was that, apparently, none of the strategic plans mentioned Goals 1 (no poverty), 6 (clean water), and 13 (climate action). The sampled universities in Turkey have established a restricted set of strategic objectives linked to SD Goals 2, 5, 10, and 11. These remarkable findings prompt inquiries into the underlying reasons for this constrained scope, warranting further investigation. A potential factor contributing to the limited objectives regarding these goals could be traced to a lack of awareness and understanding of the intricate connections between these goals and the overarching mission of higher education institutions.

Keywords: sustainable development goals; strategic plans; higher education; quality education; Türkiye

1. Introduction

Higher education institutions (HEIs) can be engines of societal transformations [1], and universities are important incubators for finance, talent, and innovations [2,3]. In addition to this wider significance, universities are being buffeted by many forces and forced to reconsider their missions and goals [4] as these institutions create, form, and shape the future leaders, decision-makers, and intellectuals of the social, political, economic, and academic sectors [5–10], contributing to the advancement of society [11].

Since the 1990s, universities worldwide have embraced the overarching sustainability movement and, in particular, the 2015 United Nations SDGS. Many academic institutions have committed themselves to implementing sustainability through curriculum, research, as well as sustainability initiatives [12–14]. Universities hold tremendous potential to contribute towards sustainability [15] and have a major influence on the social environment of a region; therefore, these institutions must assume responsibility for creating long-term, future-proof sustainable development [8]. Since universities are under increasing scrutiny, university leaders should ask themselves how to most effectively achieve sustainability in the higher education context. This mission of universities raises the question "how must universities ensure that sustainability becomes an integral part of the university culture?" This concern has been the driving force of the study in order to create a multiplier effect within higher education in the short and long term [16,17].

Sustainable development goals (SDGs) have been prepared as a continuation of the United Nations Millennium Development Goals implemented in 2000 and as an agenda



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Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). that carries the 17 goals even further [18,19]. Under the framework of the 2030 Agenda, the objective is to engage all societies in global endeavors aimed at diminishing poverty, enhancing global well-being, safeguarding cultural and social values, and mitigating environmental harm. This novel global development strategy underscores concerns spanning social and environmental aspects, including gender equality, addressing the needs of marginalized groups, minimizing food waste, combating desertification and drought, safeguarding biodiversity, and addressing economic factors such as growth, technological advancement, employment, and industrialization, thus highlighting a comprehensive approach to sustainable development [20].

The new 2030 Agenda for Sustainable Development clearly reflects the importance of an appropriate educational response [20,21]. The importance of Education for Sustainable Development (ESD) has been duly recognized as a crucial element in the global agenda, and education is a key enabler for the achievement of all 17 sustainable development goals (SDGs). Quality education (SDG 4), considered to be a driver for the achievement of all 17 SDGs, is the most powerful transformative force in the world today to develop equality, promote human rights and dignity, help to eradicate poverty, foster sustainability, and build a better future for all [20,22].

Global issues impose a new agenda to redefine the strategies of higher education institutions (HEIs), implement the 2030 Agenda for Sustainable Development, and cope with the targets established in "Transforming our World: the 2030 Agenda for Sustainable Development." The 2030 Agenda for SDGs is characterized by the direct involvement of higher education institutions in addressing the 17 SDGs identified in Agenda 2030. Higher education institutions, then, are also strategic stakeholders in achieving SDGs through initiatives at universities. Higher education institutions that have become the center of the SDGs movement [1,23] play a pivotal role within society in contributing to the development of sustainable humanity [24], as well as a critical responsibility in integrating SDGs into institutional strategic plans [25]. These contributions make universities more essential in creating societies and a workforce that is more sensitive to sustainability agendas. Therefore, universities are uniquely positioned to address this enormous challenge in order to build a better, global, sustainable future. Universities are the places in which the next generation of professionals worldwide are being educated. These educated political and business leaders will make better economic decisions related to society and the environment in the future [26-29].

The contribution of universities at the level of SDGs could be very extensive as they serve in all these fields, such as teaching and learning, research, innovation, technology production, climate change, governance, social leadership, and public commitment [27]. Universities are the strategic stakeholders [30] to develop strategies, methods, and research to implement SDGs while simultaneously realizing the intended goals [23,31]. Strategies set by universities will encourage local and regional intervention and support local and regional participation for SDG implementation [24]. The implementation of sustainable principles requires common strategies and synergy with higher education institutions. Information on how the university community translates SDGs into concrete objectives, strategies, and actions is still patchy, with the number of universities engaged in this type of reporting still being a concern [32,33]. Therefore, the improvement of universities' reporting practices enhances the disclosure of organizational performance and increases dialogue with stakeholders [32].

Universities have largely ignored global, cross-sectoral, multi-stakeholder developments in accounting for sustainability [2]. Indeed, universities are expected to include global issues in their value-creation processes through a holistic approach [2,30,34,35]. Higher education institutions are also essential in the establishment of societal values and the culture of the society, raising the newer generations with an innovative perspective within the framework of these values. Universities are leaders in education, research, and innovation, all of which underline their key role in helping society address these challenges [35]. Furthermore, through their teaching, research, and strategizing, university institutions need to educate students with the necessary knowledge and skills to achieve the SDG targets [2,33,35]. Universities are also considered to be role models that emphasize global goals through innovative initiatives and active policies [2,33,36].

HEIs are playing their own role in achieving and amplifying value-creation processes. Universities play a key role in elaborating and disseminating the sustainability theme and demonstrating a strong commitment to putting these principles into practice. Regarding the first issue, universities can identify sustainability needs and adapt them not only to research topics and educational programs [37] but also through strategic planning activities. Within this scenario, many universities have focused on integrating sustainable principles in their strategic plans due to the increasing awareness of the social role represented by HEIs. Universities with the adopted strategies based on SDGs become visible and understandable by stakeholders while highlighting the commitment to a new balance between business, the environment, and the social sphere. HEIs having a strategic vision regarding SDGs can contribute to the main driver of the country's economic, social, and other critical development [31]. Universities have to design policies and strategies from a whole-institution perspective to holistically integrate SD within its global goals [33,38].

Global needs and sustainable development goals result in universities taking a vital role in building the future. Regarding this agenda, Türkiye put the concept of sustainable development on its agenda in 1996 after the conference "United Nations (UN) Environment and Development" held in Rio in 1992 and later on took this concept into its Development Plans and many policies in the following years. The concept of sustainability has been included in the Development Plans, and these policy texts that include the concept of sustainable development have been important components of Türkiye's sustainable development agenda. Türkiye aims to ensure effective coordination among all stakeholders in the implementation phase of the 2030 Agenda. The 2030 Agenda imposes a responsibility not only on governments but also on businesses, NGOs, and higher education institutions [39]. The Council for Higher Education in Türkiye (COHE) is the top institution responsible for strategic planning, coordination between universities, and quality assurance mechanisms in higher education. COHE agreed on the importance of Education for Sustainable Development after the proclamation of the Decade of Education for Sustainable Development and accepted it as a principle that Türkiye's new agenda should be included in the planning of universities. COHE encourages universities to act in a way that is related to sustainable development goals.

Deliberately and proactively concentrating on the SDGs can facilitate transformative change within the university, contributing to a more sustainable and inclusive future. Therefore, it is worth investigating to what extent and how these global issues and priorities accepted by CoHE are included in the agenda of universities in Türkiye. To the best of the authors' knowledge, this is the first study seeking to explore how universities in Türkiye integrate SDGs into their strategic plans and this description could be a starting point for assisting HEIs to integrate SDGs into their action plans. How sustainable universities are can be used as a communication tool to visualize the sustainable practices adopted by universities [40].

Higher Education Institutions in Türkiye

The transition of HEIs in Türkiye to the implementation of strategic planning dates back to 2006. All public institutions in Türkiye were required to prepare strategic plans and comply with these plans with the Public Financial Management Control Law No. 5018 in 2003 [41], and this law adopted the "strategic management" approach, including the basic principles of effectiveness, efficiency, as well as the concepts of participation, accountability, and transparency [42]. The obligation of preparing strategic plans for public institutions in accordance with Article 9 of Law 5018 was introduced after recognizing the lack of administrational planning in the 2000s [43]. For this reason, it has become an important task of all institutions in Türkiye to prepare strategic plans and to follow them in line with country policies and targets. In continuation, universities became responsible for preparing strategic plans in 2006 [44]. In addition to Law No. 5018, higher education institutions in Türkiye are subject to "Regulation on Procedures and Principles of Strategic Planning in Public Management" and "Strategic Planning Guide for Universities" in the implementation of strategic plans. In addition, "Regulation on Academic Evaluation and Quality Improvement in Higher Education Institutions" has also emphasized strategic planning in universities. The relevant regulation imposed an obligation on universities to define strengths, weaknesses, opportunities, and threats through internal and external evaluations in order to improve quality and transform these strategies into concrete goals while monitoring performance indicators [45]. Working in coordination with the Strategy Development Department, the Strategy Development Board directs the strategic plans and ensuring their follow-up [46].

International ranking is a significant evaluation criterion in higher education in Türkiye. HEIs have traditionally employed international rankings as a means to evaluate and compare their performance with that of other universities. Subsequently, they scrutinize the factors contributing to their success or shortcomings. Universities use international rankings as an indicator of success to enhance the reputations of their institutions and to increase their credibility in the business world, as well as a promotional tool to attract both researchers and students. Students also rely on rankings to make decisions about the choice of HEIs [47]. University rankings have become a significant component in forming an institutional identity and helping assess the prestige, value, and price of universities. Universities strategically leverage the status provided by rankings to shape and define their institutional identities [48]. Therefore, the Council of Higher Education aims to evaluate universities using national and international criteria and create a competitive environment. One criterion is international ranking indexes, and the other is research university status.

A national criterion for ranking is "research university", which was introduced by The Council of Higher Education in 2017 within the scope of the "Specialization and Mission Differentiation Project". The performance of the universities in Türkiye is evaluated according to the criteria determined by the "Monitoring and Evaluation Commission" established by COHE. The criteria to evaluate university performance include three headings, "research capacity, research quality and interaction and collaboration", and 32 indicators. A total of 10 universities were declared as research universities in 2017 [49], whereas, at present, 22 of the universities listed in Table 1 were evaluated as research universities in 2023 [50]. Being a research university sets a very clear and high criterion for acting as a pioneer [51], which entails the strengthening of potential universities with financial, administrative, and academic support in order to ensure world-class university standards [52]. Research universities are recognized as the institutions that have determined a strategic roadmap and carried out this working discipline in accordance with this plan. The strategies of the university status [51].

Higher education in Türkiye has grown into a system of mass higher education in the 2000s. There has been a great growth in the number of universities and students and access to higher education [42]. A total of 208 universities, including 129 state, 75 foundation, and 4 foundation vocational schools, accommodate around 7 million students and 184,566 faculty members [53]. However, the level of international competitiveness seems inadequate [54]. Only 7 universities in Türkiye are among the top 1000 universities worldwide, and 15 of the universities are listed among the top 1400+ according to QS Rankings.

Various studies investigating the strategic plans of the universities in Türkiye mainly focused on entrepreneurship [55], a comparison of the planning process [56,57], thematic analyses for the mostly focused targets [58], the effects of strategic management of the universities on performance [59], and internationalization [60]. The study conducted by Dağlar [58] evaluated 112 state and 67 foundation universities according to their strategic plans and concluded that universities mostly set plans related to education, scientific research, community services, institutionalization, infrastructure, and stakeholders in

their strategic planning. In addition, foundation universities also mention targets for finance and recognition. The study by Vural Yılmaz [60] investigated the strategic plans of 90 universities in terms of internationalization and found that claiming to serve as a global university has not been a realistic goal as the universities were far away from internationalized perspectives. It is evident that studies investigating the strategic plans of universities in Türkiye lack a focus on sustainability and the understanding of SDGs. Therefore, this is the first study aiming to determine how universities in Türkiye integrate SDGs into their strategic plans and this study can serve as an initial point for better steps to adopt SDGs to universities' strategies.

With this research, the intention is to indicate how universities in Türkiye integrate SDGs into their strategic plans. The study allows us to identify how well universities meet 17 SDGs by responding to the following research questions:

- 1. Which university had strategic goals relating to the highest number of SDGs in the Strategic Plans?
- 2. How many objectives relating to SDGs are contained in the Strategic Plans?
- 3. How do universities in Türkiye define strategic objectives relating to SDGs?

Table 1. University ranking and validity years of the strategic plan.

2023 QS World University Ranking	2023 Ranking	Validity Years of the Strategic Plan
Koç University *	477=	2020–2024
Middle East Technical University *	501-510	2023–2027
Sabancı University *	531-540	2021–2025
İstanbul Technical University *	601-650	2022–2026
Boğaziçi University *	701–750	2020–2024
Hacettepe University *	801-1000	2023–2027
İstanbul University *	801-1000	2019–2023
Ankara University *	1001-1200	2019–2023
Gazi University *	1001-1200	2019–2023
İstanbul Aydın University	1001-1200	2018–2022
Yıldız Technical University *	1001-1200	2021–2025
Akdeniz University	1201-1400	2022–026
Anadolu University	1201-1400	2019–2023
Dokuz Eylül University *	1201-1400	2021–2025
Ege University *	1201-1400	2019–2023
Gebze High Technology Institute *	1201-1400	2022–2026
İstanbul Bilgi University	1201-1400	2021–2023
İzmir Institute of Technology *	1201-1400	2019–2023
Marmara University *	1201-1400	2021–2025
Atatürk University *	1401+	2019–2023
Çukurova University *	1401+	2019–2023
Erciyes University *	1401+	2022–2026
Sakarya University	1401+	2020–2024
İstanbul Cerrahpaşa University *	No Ranking	2021–2025
Bursa Uludağ University *	No Ranking	2022–2026
Firat University *	No Ranking	2019–2023
Karadeniz Technical University *	No Ranking	2019–2023

* These universities are also named "Research University", according to COHE. Sourced from (https://www.yok.gov.tr/Sayfalar/Universiteler/arastirma-universiteleri.aspx (accessed on 8 November 2023)) and originally created by the authors.

2. Materials and Methods

The study was designed as a qualitative research method based on document analysis. Document analysis is considered a research design as it includes both data collection and analysis techniques together. This research design is based on the systematic analysis and evaluation of both written and electronic documents [61]. In this research, the universities to be analyzed were selected according to being a research university or being included in the top QS World University Rankings.

The QS World University Rankings, which is defined as the most comprehensive ranking of its kind, asses the universities with various criteria such as academic reputation, employer reputation, faculty/student ratio, citation per faculty, international faculty ratio, international student ratio, and international research network. However, the QS World University Rankings introduced three new criteria, which are international research collaboration, employability, and sustainability [62]. It is expected that the universities in QS World University Rankings include more goals related to SD and work to achieve world standards. International and national competitiveness is crucial for universities in Türkiye; therefore, the QS World University Rankings or the research university category was established as a criterion, and universities were determined according to one of these two criteria.

The number of universities at the time of this study was 208 in Türkiye, including 129 state, 75 foundation, and 4 foundation vocational schools (https://istatistik.yok.gov.tr/ (accessed on 8 November 2023)). The scope of the study consists of 27 universities, representing 13.4% of the universities in Türkiye. A total of 23 of these universities are funded by the state, and 4 are privately funded. Moreover, 22 of these universities are named "Research University". Additionally, 4 of them are not listed in QS World University Rankings. The current strategic plans announced on the selected universities' websites were included in the review. The validity years of these Strategic Plans are given in Table 1.

All strategic objectives of the universities included in the research are provided in Supplementary Table S1. After the selection of universities, the official web pages of the universities included in the sample were scanned, and their announced strategic plans were reviewed. At the beginning of the study, 28 universities, which met the criteria for the study, were selected, but one of the universities was excluded as its strategic plan was not announced on its website. Strategic plans of 27 universities were downloaded and archived by researchers. The strategic plans were thoroughly scanned. The main objectives in the current strategic plans of the sample universities were manually coded and analyzed in relation to the SDGs, and data were coded under the 17 SDGs given in Table 2. To answer the research questions, keywords were underlined for each of the sustainable Development Plans, and strategic plans were analyzed through these keywords and associated with the goals.

Table 2. SDGs and abbreviations.

Sustainable Development Goals	
SDG-1 No poverty	SDG-10 Reduced inequalities
SDG-2 Zero hunger	SDG-11 Sustainable cities and communities
SDG-3 Good health and well-being	SDG-12 Responsible consumption and production
SDG-4 Quality education	SDG-13 Climate action
SDG-5 Gender equality	SDG-14 Life below water
SDG-6 Clean water and sanitation	SDG-15 Life on land
SDG-7 Affordable and clean energy	SDG-16 Peace, justice and strong institutions
SDG-8 Decent work and economic growth	SDG-17 Partnership for the goals
SDG-9 Industry, innovation, and infrastructure	

Originally created by the authors.

All strategic plans of the universities contained the sections of preparation process, situation analyses, future outlook, differentiation strategy, strategy development, monitoring– evaluation, updating the strategic plan, and presenting the strategic plan. Among these sections, the strategic development section, which constituted the data source of the study, included goals, targets, performance indicators, and strategies. While each university had a total of 4–6 strategic objectives, various targets and indicators were defined under these objectives. The Krippendorff's Alpha value has been calculated to measure the agreement between two coders. The calculated Krippendorff's Alpha is 0.9892. This high value indicates strong agreement among the coders, reinforcing the reliability of the coding process and interpretation of the data [63]. The strategic plans of all universities were examined under the heading of main objectives and targets. Throughout the analysis, the strategic objectives declared on the universities' websites and the targets under these aims were scrutinized. Objectives associated with SDGs were identified, and the number of keywords used in these objectives was examined. Tables were then created to present these findings.

3. Results

3.1. Which University Had Strategic Goals Relating to the Highest Number of SDGs in the Strategic Plans?

Which universities are more focused on SDGs in their strategic plans was a concern of the researchers, and to answer this question, the plans were analyzed in order to define the distribution of SDGs in the universities' strategic plans and the number of objectives relating to these SDGs. The number of objectives for each SDG is indicated by one dot in each colored field. Results are presented in Figure 1.

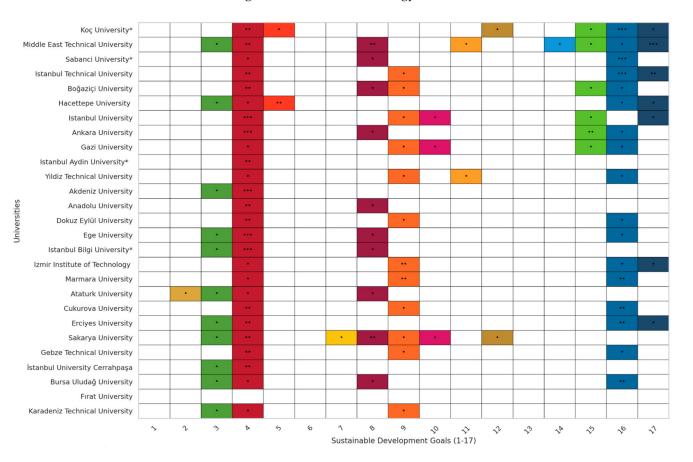
The distribution of SDGs in the universities' strategic plans is presented in Figure 1. All the selected universities except Firat University have set at least a few objectives addressing SDGs. Within all these selected universities, it is surprising that Firat University has set no SDG-related objectives. Middle East Technical University set the most strategic objectives related to SDGs, and each of these 12 objectives covers different goals mentioned in SDGs. This suggests that Middle East Technical University is more dedicated to achieving SDGs. According to the number of strategic objectives regarding SDGs, Koc University and Sakarya University are in second place by stating nine different objectives addressing SDGs. Koç University, which is a foundation university, has set objectives for Goals 4, 5, 12, 14, 15, 16, and 17. Sakarya University has also set objectives related to SDGs 3, 4, 7, 8, 9, and 11. After the first three universities, Istanbul Technical University has eight strategic objectives, and Istanbul University and Ankara University each address seven strategic objectives. Boğaziçi, Hacettepe, Ege, and Erciyes Universities have set six different objectives regarding SDGs. Istanbul Cerrahpaşa University has three strategic objectives related to Goals 3 and and Karadeniz Technical University also has three strategic objectives, including SDG 3, 4, and 9. İstanbul Aydın University and Anadolu University have only set two strategic objectives addressing Goal 4 "Quality Education". It is a remarkable result that Goal 4, "Quality Education", is not directly addressed in the objectives of Sabancı University.

Of all the strategic plans of the universities, Goal 4 (quality education) and Goal 16 (peace, justice, and strong institutions) receive the most attention. G 4 appears in all but one of the plans in our sample, while Goal 16 is found in 17 strategic plans. Goal 3 (health), Goal 8 (decent work and economic growth), and Goal 9 (industry, infrastructure, and innovation) appear in 10–12 of the plans, while Goal 15 (life on land) and Goal 17 (partnerships) are found in 6 and 7 plans, respectively. The remaining Goals 2, 5, 7, 10, 11, 12, and 14 are only included in one to three of the universities' strategic plans. The remarkable finding is that climate action is not mentioned in any of the strategic plans of the sample universities. The most striking result was that, apparently, none of the strategic plans mentioned Goals 1 (no poverty), 6 (clean water), and 13 (climate action).

3.2. How Many Objectives Relating to SDGs Contained in the Strategic Plans?

The strategic plans of the 27 universities were investigated to analyze how frequently SDGs were mentioned. We also aimed to find out which goals were addressed the most and which goals were emphasized more in strategies. The number of objectives contained in the strategic plans of the universities in Türkiye is presented in Figure 2. The objectives of the universities matched with SDGs are provided in the Supplementary Table S2.

Goal 4, "Quality Education", was mostly emphasized, ranking first with 47 different objectives in all strategic plans of the universities. Goals 16, "Peace, Justice and Strong Institutions", ranked second as it was repeatedly addressed in 27 different objectives. After the first two goals, Goal 9, "Industry, Innovation and Infrastructure", appeared in 14 different objectives, and Goal 8, "Decent Growth and Economic Growth", appeared in 12 different objectives. We also came across Goal 3, "Good Health and Well-Being", in



11 objectives and Goal 17, "Partnership for the Goals", in 10 objectives. The fact that there was only one objective for three goals (Goal 2, 7, 14) is an important finding. These goals are Zero Hunger, Affordable Clean Energy, and Life Below Water.

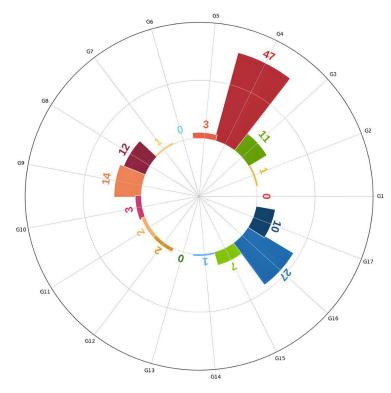
* These universities are privately funded.

Figure 1. The distribution of SDGs in the universities' strategic plans. Originally created by the authors.

3.3. How Do Universities in Türkiye Define Strategic Objectives Relating to SDGs?

How universities in Türkiye define strategic objectives related to SDGs and which words were frequently used to set these objectives are also vital to visualize the understanding of SDGs. Results are presented in Figure 3. It is not a surprise but an expected result that "education" (f30), "research" (f27), and "quality" (f25) were the most frequently expressed keywords in all the strategic objectives of the selected universities. After these first three keywords, "social" (f19), "strengthen" (f18), "develop" (f16), "international" (f16), "capacity" (f16), "qualified" (f14), and "development" (f14) follow. "Institutional" (f 11), "entrepreneurship" (f11), "education and training" (f10), "innovation" (f9), "improvement" (f 9), "improve" (f9), "social contribution" (f8), "corporate" (f7), and "value" (f7) were the words repeated many times in the strategic objectives. The words "energy", "accreditation", "digital", "health", and "sustainable" were used only twice. The words "sustainable development goal", "industry", and "consumption" were repeated only once.

Various keywords were used to define SDG-related objectives; "entrepreneurship" was used by Boğaziçi, Hacettepe, İstanbul, Gazi, Akdeniz, Anadolu, İzmir Institute of Technology, Atatürk, Çukurova, and İstanbul Cerrahpaşa Universities; "innovation" was used by Boğaziçi, Atatürk, and Çukurova Universities; "institutional capacity" and "infrastructure" was used by Hacettepe, Gazi, Akdeniz, Ankara, Dokuz Eylül, İzmir Institute of Technology, Marmara, Çukurova, and İstanbul Cerrahpaşa Universities; "university-industry coopera-



tion" was used by Ankara, and Sakarya Universities; "internationalization" was used by İstanbul Aydın, Anadolu, Ege, Erciyes, and Sakarya Universities.

Figure 2. The number of objectives contained in the strategic plans. Originally created by the authors.



Figure 3. Word cloud for the frequency of the keywords to define strategies related to SDGs. Originally created by the authors.

Universities set remarkable objectives related to sustainability in their strategic plans. Koç University, İstanbul Bilgi University, and İzmir Institute of Technology set objectives using "research", "education", "management", and "social contribution" themes. The other universities generally used sentences to set objectives and targets. Middle East Technical University, having a high awareness of sustainability among other sample universities, set completely direct objectives as "to sustainably increase the quality of education for national and international students" and "to develop sustainable, innovative research studies that can adapt to changes and needs at national and international scales", and all its objectives match with sustainability. Sabanci University defines a clear objective as "increasing impact on focused

global issues and SDGs", and other objectives also match with sustainable issues. İstanbul Technical University mainly defined objectives by phrases such as "strengthening education and training with an innovative and dynamic approach", "raising awareness of society", and "international active role". Boğaziçi, Hacettepe, İstanbul, and Gebze Technical University set objectives on education using "strengthening the quality of education"; Marmara, Anadolu, Gazi, Ankara, Erciyes, İstanbul Cerrahpaşa, and Karadeniz Technical Universities used "increase/improve quality education"; Çukurova, Dokuz Eylül, and Akdeniz Universities used "develop quality of education" to define objectives for education.

Sakarya University also set a direct objective related to sustainability: "to be a leading university in the national and international arena in the realization of sustainable development goals". It also defined a detailed objective addressing approximately all themes emphasized in SDGs: "To carry out sensitive practices in the fields of education, health, social and environment, taking into account the principles of sanitary conditions, renewable energy, human development, social development, reduction of inequalities, responsible consumption and production, environmental protection in order to realize the responsible university". Bursa Uludağ University also stated that it wished to "enable social contribution through social responsibility and sustainability awareness".

4. Discussion

This paper provides an overview of the Strategic Plans of the universities in Türkiye related to SDGs. A total of 27 universities from Türkiye, either in the top 1000+ according to QS World University Rankings or in the category of research university, were included and investigated to indicate how these universities integrate SDGs into their planning, imply how well these universities meet 17 SDGs, and infer how dedicated they are to SDGs. To explore this, a four-stage review was carried out; strategic objectives were listed, targets under these objectives were reviewed, objectives defining sustainability were analyzed, keywords were used to set objectives were counted, and results were presented.

That the sample universities set various objectives regarding SDGs, except Firat University, is a significant result. Universities in the top 1000+ according to QS World University Rankings or placed in the category of Research Universities in Türkiye offer many strategic objectives regarding SDGs, including quality education, strong institutions, industry, innovation and infrastructure, economic growth, good health and well-being, partnership for cooperation, and life on land.

Quality education is the most emphasized goal among these strategic objectives of the universities. This is an expected result since education is one of the three pillars of the HEIs [64]. This result is consistent with the study conducted by Nauta et al. [37], which found that education and learning are the most represented planning for sustainable development. In addition, universities consolidate the process of teaching quality enhancement, expanding and requalifying the range of education with a view to sustainability [37]. However, it is a remarkable result that Sabanci University and Firat University did not set a direct objective regarding "Quality Education". This means that these two universities ignore not only their key role but also Education for Sustainable Development [65,66].

Goal 16, "Peace, Justice and Strong Institutions", is the second goal emphasized mostly in the strategies of the sample universities. This result indicates that higher education institutions will be a pioneer in every field and set an example with their strong institutional culture. This goal is vital in promoting inclusive societies with integrity at multiple scales [67], and this goal addresses the issue of promoting inclusive societies based on strong institutions and the rule of law [68]. Strategies related to Goal 16 imply a lot and apply to all goals related to education, health, economic growth, and climate change [69].

Goal 9, "Industry, Innovation and Infrastructure", and Goal 8, "Decent Growth and Economic Growth", come after the first two emphasized goals after Goal 9. According to Fei et al. [70], industry is a key factor in the global efforts to achieve SDGs, and the results of the study imply that 10 out of the 17 SDGs were impacted by the construction industry. Saieed et al. [71] calculated the SDG 9 index for 124 countries and indicated that 58 countries

progressed towards the SDG 9 target. In comparison, the remaining 66 countries regressed away from these targets, and in this study, Türkiye was located among the 15 countries which showed greater progress on SGD 9 targets.

The most significant finding is that the universities that set the most SDG-related objectives are both at the forefront of the QS World University Rankings and are in the category of "Research Universities". This result emphasizes that success is not accidental. This result also reveals that the leading universities mostly meet expectations regarding SDGs. This is consistent with previous studies, and the study concluded that the top 20 universities were also leaders in achieving sustainability [72]. Gedikkaya et al. [73] concluded, in their study, that universities in Türkiye had an increasing awareness and interest in sustainable development, and every year, more universities were included in indexes, such as STARS, UI, GreenMetric, and Times Higher Education Impact Rankings. However, our study showed that not all Turkish universities tend to include all SDGs in their strategies. For instance, some universities, including İstanbul Cerrahpaşa University, Karadeniz Technical University, İstanbul Aydın University, and Anadolu University, set very few strategic objectives matching SDG perspectives. The fact that Sabancı and Fırat University have not set any objectives for quality education is a remarkable result.

The fact that universities in Türkiye set no direct strategic objectives for climate action was an extremely striking result. This result is contrary not only to national policies but also to international emphasis. As in the national context, the Climate Change National Action Plan 2011–2023 designed a framework and formulated policies in order to mitigate and prevent climate change in Türkiye by creating awareness in society [74]. Climate change has an impact on almost all aspects of sustainable development, and this impact on SDGs gives rise to a pressing need to understand how action to address climate change can be reinforced [74]. The Times Higher Education Impact Ranking used climate action metrics to measure the climate action performance of the universities, and the latest list for 2020 indicates that the top five universities are in New Zealand, Australia, and the United States [75]. The world needs future leaders to be forward-thinking and innovative in industry, which requires them to feel confident to challenge the stereotypes on climate action and provide alternative solutions [76].

SDGs are a global framework for addressing pressing socio-economic and environmental challenges. Despite the universality of these goals, there appears to be a notable gap in the explicit incorporation of certain SDGs within the strategic plans of Turkish universities. This investigation delves into the academic discourse surrounding this phenomenon, aiming to uncover the underlying factors. The fact that sample universities in Türkiye have set a limited number of strategic objectives related to SD Goals 2, 5, 10, and 11 is noteworthy. This finding raises questions about the reasons behind this limited scope, and further investigation is needed. One contributing factor to the limited objectives of these goals may stem from a lack of awareness and understanding of the interconnectedness between these goals and the broader mission of higher education institutions. Tosun and Leininger [77] reported the Turkish context in their study and informed that the approach of Türkiye was interpreted as being consistent with previous initiatives aimed at ensuring sustainable development through SDGs, and the study also suggested a continuity in the government's policy approaches adopted in the past. Studies have shown that limited knowledge about the objectives associated with SDGs can impede their integration into institutional strategies [78,79]. There is a need to synchronize the policies implemented in one objective with the others [77]. Caiado et al. [80] supported this vision, stating that it was evident that SDGs should serve as a guiding framework for development policies. The challenges posed by the SDGs are interconnected and should be addressed collectively in a holistic manner rather than tackling them individually.

It is essential to note that all these analyses of the strategic plans and the objectives on sustainability should not be assessed as a guarantee of effective implementation practices on campus [81]. It is worth highlighting that universities have not been able to internalize and institutionalize an SDG insight [32,82]; that is, universities have not served to achieve

institutionalization, which means all planning and innovation actions are part of the culture of the whole university. Ilhan [83] indicated that the limitations of legal regulations in Turkey, the lack of competitiveness among public institutions, the rigidity and slowness of planning processes, the disregard for planning, and the difficulty of long-term planning are considered challenges in preparing strategic plans. All these reasons can be obstacles to internalizing and determining the correct strategy. Moreover, the study conducted by Ilhan [83] highlighted that state universities in Türkiye prepare strategic plans in accordance with the strategic planning guide; however, these strategic plans do not guarantee the achievement of the objectives. Hence, the stages of implementation in the continuation of strategic planning should be monitored and evaluated. We believe that the best strategy to engage SDG within universities is to bring a top-down approach, and this requires a reversed viewpoint and looking through the biggest lens first [84]. It is also important to adopt an understanding of how the perspective related to sustainability should be harmoniously implemented with each goal. Additionally, the alignment between each goal should be considered, and they should be included in strategic planning accordingly. Therefore, it is anticipated that wider sustainable engagement will be catalyzed as an institutional strategy rolls out.

5. Conclusions

The paper reveals that the exclusion of key SDGs from the strategic plans of Turkish universities is a multifaceted issue involving factors such as limited awareness, resource constraints, institutional culture, and the broader policy environment. Addressing this gap requires a comprehensive approach that considers both internal and external dynamics shaping university priorities. Future research should delve deeper into the specific contextual nuances within Turkish higher education institutions to inform targeted strategies for the integration of essential SDGs into their strategic frameworks. Universities should be engaged more in SDGs and make SDGs explicit in their academic policies, institutional mission, strategy, and planning. Universities should develop and utilize SDG strategies to create a multiplier effect instead of an abstract concept. Strategies need to be well-planned and organized in such a way as to meet all goals [85].

The failure to incorporate the understanding of sustainability into strategic plans also poses a threat to international rankings. Although the QS World University Ranking criteria include the criterion of sustainable development goals, it is observed that universities in Türkiye do not fully comprehend these criteria and do not reflect them in their strategic plans. This may lead to the non-fulfillment of QS World University Ranking criteria and jeopardize these rankings.

The research just defined the most emphasized goals regarding SDGs included in the strategic plans of the universities in Türkiye. How these universities understand these SDGs in detail and put them into practice is still unknown. With this perspective, how universities will implement these strategies will be essential. Nevertheless, the difference between policy and implementation will be decisive, and in future research, the level of realization and effectiveness of the strategic objectives of the universities can be investigated. Research can be further advanced in the strategic plans of the universities by revealing the effectiveness of these strategies. Future research with a larger sample across Türkiye would be beneficial. The fact that there is no mention of HEIs in Türkiye promoting SDGs at the level of students and their learning can also be considered for future studies.

Supplementary Materials: The following supporting information can be downloaded at: https: //www.mdpi.com/article/10.3390/su152416799/s1, Supplementary Table S1. Strategic Goals of the Universities in Turkey. Supplementary Table S2. How many objectives relating to SDGs contained in the Strategic Plans?

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