

Chapter 9

The Impacts of Energy Transparency for the Improvements of Health Tourism



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9.1 Introduction

For centuries, secrecy was accepted as one of the basic principles in government. It is also a fact that the dominant legal structure of the past provides a facilitating and supportive ground for the maintenance of this confidentiality principle. Later on, the principle of confidentiality became questionable due to the replacement of democracy. The right to information, which was granted to individuals with the constitutional arrangement made in Sweden in 1766, has become one of the common regulation and supervision principles in all developed democratic countries since the end of the twentieth century. With the spread of democracy and the right to full information, there has been a break from the traditional management approach. The widely accepted meaning in the period when the idea of transparency started to become widespread was the recognition of the right of access to the requested information and documents. Accordingly, it can be said that the transparency process in management is closely related to the recognition of the right to information, especially by the governed. As a result of all these developments, over time, the

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principles of transparency and accountability have begun to be adopted by moving away from the principle of confidentiality.

Transparency is also a result of globalization. Globalization has made the actions of important actors all over the world very closely related to each other. At the same time, it has begun to be seen as a structural element of the democracy ideology in modern times. On the other hand, it is accepted as one of the basic criteria for the healthy execution of all functions and activities of the states. Today, the concept of transparency in national modern law dates back to the last 30 years. Transparency in the legal language is a tool used in the disclosure of financial matters, in the policy proposals and organizations or laws of institutions. In interstate relations, it is accepted as “a good governance tool that shows the reliability of the parties” and “institutional accountability mechanism”.

9.2 The Concept of Energy Transparency

Energy transparency is explained in dictionaries with the meanings of transparency, openness, clarity, active disclosure, reliable information for the energy companies. As a matter of fact, openness, which is one of the meanings corresponding to the concept of transparency, is one of the four conditions required for the existence of a perfectly competitive market in economics books. Accordingly, openness means that all actors performing production activities have full and unhindered access to all kinds of information in the decision-making processes regarding profit maximization and all actors in consumption in decision-making processes. In terms of terminology, transparency in institutions means regular information sharing, good governance, accountability, and information acquisition (Dinçer, Aksoy, et al., 2022; Dinçer, Yüksel, & Martínez, 2022; Dinçer, Yüksel, Mikhaylov, et al., 2022; Dong et al., 2022; Yüksel & Dinçer, 2022; Zhang et al., 2022).

In its most succinct terms, transparency for the markets can be expressed as providing information to stakeholders on issues such as companies themselves, their activities, performance, and financial status. Although this concept is only one of the contents within the framework of corporate governance, it is considered as one of the leading indicators of successful corporate governance practices as it is the measure of how and how openly the financial information about the company and other corporate governance practices are presented to the public. In particular, the importance of transparency in capital markets has been increasing in recent years (Dai et al., 2022).

When we look at the studies in the literature, transparency is handled in three groups in terms of the areas it is applied: transparency in the public sector, transparency in the private sector and transparency in voluntary non-governmental organizations. Transparency in the public sector is considered as one of the tools that is based on the concept of democracy and ensures both citizens' trust in the state and states' trust in each other in terms of international relations. Transparency in the private sector is substituted as one of the tools based on corporate governance and

good governance and ensuring that companies are open to their stakeholders and can give confidence. Finally, in non-governmental organizations, which are the third sector based on volunteerism, transparency is important in terms of providing openness and reliability regarding activities that create a critical social benefit (Bistline et al., 2021).

On the other hand, there are different levels of transparency. These can be expressed as corporate transparency, operational transparency, financial transparency and general transparency. At this point, the least sensitive level of transparency is financial transparency. The grievances that have occurred as a result of the scandals in the accounting reports and audits, especially in recent years, prove this situation. For example, one of the most important factors causing the 2008 global economic crisis is the lack of transparency regarding financial instruments.

Transparency is closely related to many concepts such as accountability, legitimacy, participation, good governance, democracy and independence. However, when we look at the literature, it is seen that transparency is mostly discussed in relation to the concept of accountability. Accordingly, transparency is put forward as a principle that has been revealed in order to ensure or increase accountability. The second concept most associated with the concept of transparency is the concept of governance. Today, in most countries and sectors, transparency is considered as one of the fundamental principles of good governance, in line with the excessive development of tools such as information technologies and the internet. Corporate governance, which can be defined as the management of senior management in institutions, corresponds to the area or system in which institutions are managed and audited. The main purpose of corporate governance is to prevent the formation of a dominant or privileged stakeholder group within the enterprise and to keep the interests of this stakeholder group first.

Transparency is the most important tool used in the supervision and surveillance of companies in the market economy. Transparency is important to companies, organizations, governments and communities. As a result of the increase in the general welfare and education level in the society, the expectations of individuals from good management have changed. One of these new expectations is the transition from a closed and hierarchical order to a structure in which participatory and transparency is ensured. Another important aspect of transparency is that it helps to easily see which actions were taken and in what ways. Transparency enables all the above mentioned stakeholders to focus on real, accurate and reliable data (Zhi et al., 2021).

On the other hand, it prevents or ensures that corruptions such as bribery and nepotism are noticed in a short time in all kinds of activities. It is also very important as it allows the implementation of business ethics principles, the expansion of the area of accountability from the management and the strengthening of non-governmental institutions. At the same time, it avoids wasting time or cost against any wrong, unreliable or useless data. Because transparency allows the actors in the market related to each other to fully understand each other's perspectives, needs, demands and goals. Especially when it is considered from a commercial and economic point of view, it allows making decisions with reasonable, functional and

conscious choices in a way that prevents all kinds of negativities that may cause injustice.

Another importance of transparency is that it helps to ensure an efficient resource allocation and efficiency. Because deficiencies such as the absence of consolidated balance sheets and poor accounting practices prevent the efficient allocation of resources. However, lack of information in the market can lead to increased transaction costs and market imbalances. It is necessary to provide full, timely and accurate information regarding the financial statements and financial positions of national companies or international institutions. When this cannot be achieved, difficulties may arise in comparative analyzes to be made in the markets and may lead to wrong investment decisions. All these situations cause instability in the market, may lead to undesirable perceptions in the global communication network and unfairly change the direction of the market. Therefore, transparency enables financial markets to function regularly, to increase the confidence of domestic and foreign investors, to stimulate growth, to detect and correct mistakes or wrong choices in a short time (Xia et al., 2021).

Small businesses that can successfully maintain transparency will grow faster and higher than other non-transparent small businesses. Finland, for example, is a country that demonstrates that small businesses with higher transparency are more financially successful. Thus, it is possible to say that transparency is a very important part of adaptation to globalization and modern service delivery.

Transparency not only changes the way actors work and do business in markets, but also allows for greater collaboration. In this way, it provides the opportunity for the actors in the market to be involved in the policy-making processes and to make suggestions that can compensate for mistakes based on past experiences. It supports markets both financially and as a trust building by mobilizing civic participation. To be able to benefit from new technologies in order to realize advanced ideals that can affect the world; It lays the groundwork for following innovations in the world. Therefore, the right to know as one of the meanings of transparency in an entrepreneurial age has turned into a compulsory need to know. Therefore, the principle of transparency is not a choice or an advantage for institutions; is a must.

There are some necessary conditions for the systematic and effective implementation of the transparency principle. These; It can be listed as determining the tools that will provide transparency suitable for each business's own dynamics, developing accounting practices that will ensure the reliability of information and increasing its quality, establishing a control mechanism in order to eliminate the negativities that may cause violations of business ethics, and establishing institutions and policies where problems related to sectors or markets or suggestions that will contribute can be conveyed.

Looking at the literature, it is understood that energy transparency is expected to have qualities such as accessibility, relevance, intelligibility, reliability and timeliness (Kafka et al., 2022; Martínez et al., 2023; Mukhtarov et al., 2022; Sun et al., 2022). These qualifications, on the other hand, must be regulated by laws and followed through audits. Above all, transparency needs to be accessible. Because if the data is not available in a complete and accessible form, it cannot create an

added value and cannot fully reveal its potential. Information obtained only on request or by paying a fee for access cannot be said to be publicly available in a meaningful and useful way. On the other hand, all data should be published as it is in the source without any changes. In order to preserve the value and functionality of the data, it should be disclosed to the relevant stakeholders as soon as possible.

However, there is a point that should not be overlooked when applying the principle of transparency: For today's free competition markets, the protection of commercial confidentiality is as critical as the problem of transparency. Because the public disclosures about the markets or companies should not lead to the public disclosure of trade secrets about not harming the interests of the institutions in question. Maintaining the delicate balance between ensuring transparency in the markets and protecting commercial confidentiality is a must for a sustainable market.

It is also important to establish functional feedback mechanisms or transparency portals for the spread of transparency. Participating digital platforms and applications can be used to achieve this. Of course, for this, it is necessary to have a good command of technological developments and new digital tools and services. In particular, new generations need to implement successful strategies that can empower the skills and tools they need to process information with the goal of ensuring that quality data can be passed on to the next generation of institutions. Therefore, it is important for market actors to constantly monitor and participate in innovations in order to increase the potential and functionality of new technologies.

In fact, it is necessary to change the mentality and establish institutional structures for transparency. For this, it is necessary to create a culture of full transparency within institutions or markets. The ways to achieve this can be listed as follows: to replace justice and honesty, to determine moral principles that facilitate compliance with the law, to ensure an efficient organizational structure, qualified distribution of duties and authorities, open communication with stakeholders with auto-control and reporting mechanisms, and a healthy internal audit activity. On the other hand, in order to ensure transparency, it is necessary to make strategic plans to adapt to globalization and to survive as companies in an increasingly competitive environment (Liang et al., 2022). It is necessary to correctly understand and interpret all the developments in the market and all the decisions taken, to make comparative analyzes, and to evaluate the experiences of companies that have failed financially, together with all their advantages and disadvantages.

In order to increase the transparency level of companies in the markets, tools such as independent auditing, accounting and financial reporting standards, internal control and risk management, and mandatory public disclosure obligation are used. Accordingly, in order to ensure that markets and companies implement the principle of transparency, it is necessary to ensure that there is no negative situation that they will fear or want to hide. Therefore, it is important that they establish strong information disclosure and openness policies. Because they can be moderate about transparency only if there are no consequences to fear and hide. For this, first of all, they must fulfill all their activities in a legal way, the companies must perform their risk management in a functional way, make good balance sheet analyzes, set up feedback tools and give regular feedback, regularly fulfill their accounting and

financial reporting, have reliable human resources, regularly informing the public/stakeholders and organizing press releases can be encouraged (Yi et al., 2021).

Unlike other markets, in the case of a merger or acquisition in the energy markets, in addition to the permission of the Competition Board, from the establishment of the company subject to the merger and acquisition to the day of the transaction and even to the continuation of this process, as well as the Energy Market Regulatory Authority. It has been accepted that it is subject to control and permission. Transparency in energy markets, as one of the areas where information security is most critical, is seen as one of the necessary conditions for ensuring free competition. In most energy markets such as electricity, natural gas, petroleum or liquefied petroleum gases, it is stated that almost all laws aim to maintain the energy market activities in a transparent, equitable and stable manner. Transparency of the market, which is one of the aims of the laws on the energy market, is based on the principle that companies operating in these markets do not keep information about their activities confidential and share them. Transparency of the energy market is only possible if all market participants share statistical information on the market within the framework of relevant regulations or voluntarily.

There have been economic and political developments, climate crises, environmental problems and security problems in the field of energy in the global energy markets. These have brought about some important structural changes and more frequent use of international law in solving problems in this field. Accordingly, transition to low-carbon markets was aimed primarily. These important structural change and transformation processes in the energy markets have started to make transparency and accountability mandatory. It is anticipated that accountability and transparency will provide more effective and permanent solutions to the problems in both global and national energy markets. It has been understood that transparency is also of critical importance for the establishment and functioning of the free competition market (Kim et al., 2021).

As a case study showing the importance of transparency; The bankruptcy of Enron, one of the largest energy companies in the United States, had consequences that shook the country as much as the post-9/11 financial crisis. Considering the related studies in the literature, one of the important reasons for Enron's bankruptcy is suggested as the problem of transparency. Accordingly, the business management and the accounting system, taking advantage of the gaps in the legal regulations, to change the information in the financial statements for their own benefit; The fact that the independent audit company ignored this just to protect its own interests brought Enron's bankruptcy. By the way, the fact that the financial statements are not reflecting the real financial situation of the business and, worse, the audit company's ignoring this is naturally caused by the gaps in the legal regulations and legal deficiencies. Therefore, first of all, legal regulations and audits should be healthy and reliable.

9.3 The Role of Energy Transparency on Health Tourism

Greenhouse gases represent chemical gases in the atmosphere that create a greenhouse effect. Greenhouse gases can occur from human and natural causes. The job of greenhouse gases is to absorb and re-emit infrared gases in the atmosphere. In fact, at a certain balance in the atmosphere, the greenhouse effect is useful for balancing the air temperature. However, if this balance is disturbed, it will become harmful. Greenhouse gases are divided into natural and indirect types. Natural greenhouse gases are classified as water vapor (H₂O), carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O) and ozone (O₃). Indirect greenhouse gases consist of fluorinated compounds such as hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF₆) gases. Most of these gases are CO₂ emissions because carbon dioxide can live longer compared to other gases. Carbon dioxide emission is called the polluted gas formed as a result of the emission of carbon-containing sources into the atmosphere. If explained in more detail, carbon dioxide emission occurs when the carbon in the content of primary fossil fuels such as coal, oil and natural gas is burned and then combined with oxygen. The amount of carbon dioxide emission is measured by the carbon footprint. The carbon footprint defines the amount of CO₂ emissions emitted by an energy-consuming source (Carayannis et al., 2022; Li, Yüksel and Dinçer, 2022; Mikhaylov et al., 2022; Yüksel et al., 2022).

In other words, it is the amount of measurement of the negative effects of products and processes and human activities on the environment in terms of unit carbon. It is possible to classify the carbon footprint in two subgroups. The first subgroup consists of domestic energy consumption and the amount of carbon dioxide emitted from transportation activities. The second is the amount of carbon dioxide that comes out indirectly from the manufacture of a product and its final conversion to scrap. In the world, energy was first obtained with the help of humans and animals. In later times, it began to be obtained from various sources. In this sense, today's industrial activities, technology and population growth have led to an increase in energy demand. Fossil fuels have been used to meet this energy demand. The use of fossil fuels causes CO₂ emissions and can cause many problems. These problems have increased global warming by causing climate change in the first place. When the effect of the greenhouse effect on climate change is examined, it is said that it is related to the density of greenhouse gases remaining in the atmosphere for many years. Because these accumulated greenhouse gases cover the earth and reflect them back again by holding long wavelengths. This causes the earth to overheat, causing global warming. In short, global warming causes climate change.

It is necessary both to prevent the increase of problems and to realize sustainable development. For this reason, renewable energy sources, which are alternative sources, are recommended. Renewable energy resources are basically obtained with the help of natural resources such as solar, wind, geothermal energy resources. When evaluated from an economic point of view, there are five basic factors that affect carbon emissions. These are economic growth, energy consumption, deforestation, population growth and per capita income. The relationship between these

elements defines the relationship between carbon emissions and economic growth. If this relationship is explained, first the population size affects the economic output and then the economic output and energy consumption. Then, energy consumption determines the amount of carbon emissions by affecting the use of fossil fuels. Forest areas based on economic growth are being destroyed. Forests have two positive tasks: absorbing carbon emissions and emitting oxygen. Therefore, there is a direct relationship between carbon emissions and deforestation. In this direction, forest areas are destroyed due to population growth, increase in the number of vehicles, industrial development and increase in energy consumption. A country has two main objectives as increasing the scarce resources it has and improving the quality of these resources (Eti et al., 2023; Haiyun et al., 2021; Li et al., 2022; Yuan et al., 2021).

These goals are achieved by increasing the production possibilities and technology, resulting in higher production. In this context, the economic cycle that has taken place is gradually affecting the environment negatively. The aim of maintaining this economic cycle is evaluated from different perspectives for developed and developing countries. In general, developing countries attach importance to physical capital accumulation such as development financing, while developed countries focus on human capital in order to maintain welfare. In addition, developed countries adversely affect the environment due to production, energy and raw material consumption. On the contrary, developing countries affect the environment in terms of water use, waste generation and transportation. Population growth increases carbon emissions by consuming energy as a result of food, beverage, shelter and clothing needs. If only economic growth is given importance without evaluating the effects on the environment, irreversible problems will occur. Environmental destructions affect human health, agricultural production and natural life. For this reason, it causes significant damage to the country and the global economy. If the per capita income of an individual in a country increase, the amount of consumption will also increase. In this context, the increase in the amount of consumption causes an increase in carbon emissions.

A country tends to show continuous growth. The main reason behind this is to realize economic development. Economic development increases energy consumption. Because the increase in economic development will increase per capita income. In this context, increasing income per person will lead to an increase in energy consumption. If the energy demand is obtained from dirty energy sources instead of clean energy sources, it will cause an increase in carbon emissions, which have a negative impact on the environment. The level of development of a country and the amount of energy it consumes have a direct proportion. In this sense, developed countries have a responsibility. Owing to air pollution, melting glaciers, disappearing animal species and the reduction of forests are gradually causing global warming (Dinçer et al., 2023; Eti et al., 2022; Fang et al., 2021; Kayacık et al., 2022). In addition, increasing economic growth will harm the nature and increase the cost of financial development. Inasmuch as a business will not continue its activities because fossil fuels are not sustainable. For this reason, it will increase the financial cost while transitioning to sustainable resources. In particular, it has been discussed

that businesses in all countries in the Kyoto Protocol should use renewable energy sources and that governments should impose sanctions on this issue.

This protocol advocates that each country should keep the amount of carbon dioxide emitted at an equal level. In this way, countries that emit less carbon will not be affected economically. In fact, there are cascading effects. In this direction, if industrialization is established irregularly, it will adversely affect the environment. These negative effects will gradually pollute the air and cause problems that will affect human health. There will be a need for treatment to fulfill human health. Therefore, input costs will increase. In addition, the individual who takes time for treatment will affect the economy by disrupting school and work duties. Although the developed countries have a great role in the spread of carbon emissions, it is the less developed and poor countries that are most affected. Because the inadequacy of public and health services will reduce the human power and prevent the development of their economy. The reason for this obstacle is the decrease in manpower, the decrease in income levels and the increase in patient-death rates. Due to their capacity to fight climate change is insufficient. For these reasons, the competitive advantage of countries is affected by carbon emission emissions through indirect and direct effects.

When it comes to competition, medical tourism has a great importance for countries. Because tourists coming from another country to improve their health contribute to the country's economy in addition to developing health enterprises. These contributions also address other sectors such as accommodation, nutrition and entertainment. In short, health tourism is the movement of individuals to get treatment from their own countries to other countries in order to regain their health. Health tourists are called international patients. These patients are being treated in different countries for three purposes. The first is the classical medical tourist visiting another country from his own country in order to receive treatment. The second occurs when a tourist traveling to another country for vacation needs urgent treatment. Finally, according to the agreements of the countries, people who come for treatment benefit from health services in another country. Health tourism is not active according to a certain season, but operates in all seasons. Therefore, the development of health tourism is important. Thanks to health tourism, a person's health is very valuable, so he can benefit from potentials that are not available in his own country. In addition, it keeps the global economy active by stimulating the country's domestic and foreign tourism.

Public health is being affected day by day with the damages caused by industrialization in the world. A nation without health will see a reduction in the potential for work and production. For this reason, a country's health opportunities will support both domestic and foreign tourism. A foreign tourist supports the income of that country by using the health resources of another country. Unlike the export activity of health tourism, it is provided by the tourist's entry into the country rather than the transfer of a good and service to another country. In this context, a tourist tends to choose the country or city where he/she will receive health services in the best criteria. This choice is made according to better service, more affordable price and more qualified health personnel. Today, the health tourism sector tends to develop

further. For example, in addition to treatment services, interest in beauty activities is increasing. In addition, the marketing activity in the health sector is also different. While this difference is that the normal product marketing strategy is aimed at selling more products, the strategy of selling more drugs in health tourism is not pleasant. In this sense, the country that makes health tourism should be sent off from the country by satisfying the tourist. Because, thanks to the recommendation strategy, the country will increase its competitiveness by increasing the development of health tourism.

When evaluated from the perspective of the country's economy, the development of health tourism will improve the country's economy. This will also be beneficial by contributing to the income of the country. In addition, it will increase competition by contributing to the development of the state and private sector. In addition, it will increase employment opportunities, which is an economic indicator. On the other hand, from a socio-economic perspective, it aims to bring income to the country, increase per capita income, help the development of regions and provide employment. Recently, awareness in the development of health tourism has increased. Therefore, rehabilitation services and services for the elderly have increased. In particular, people from different countries attach great importance to quality in the health service they receive because they have different cultures. This quality and the service provided must be sustainable. In order for a health institution to be of high quality, it is necessary to have a developed infrastructure network, organize it in accordance with standards, determine the suitability of accommodation and ensure the development of transportation networks. In addition to these, it is necessary to provide services that will benefit tourists and to apply advanced technological systems. Thus, the country engaged in health tourism will create a sustainable and quality health tourism profile.

Considering the demographic structure of developed countries, it has an elderly population. For this reason, their needs for health services have increased day by day. These healthcare costs often vary from country to country. Other reasons, it is said that the effects of globalization, problems in the infrastructure, the length of treatment periods, increasing costs, poor quality of services, increase in health literacy and protection of current health. For these reasons, citizens in developed countries with high welfare travel to other countries for treatment purposes. On the other hand, the reason for the increase in health tourism is the increasing industrialization in developed countries. Because with industrialization, air pollution and deterioration of ecological balance have increased. When evaluated within this framework, health services have been started to be received from different countries in order to protect the health of individuals and not to reduce the workforce. In fact, the relationship between health tourism and economy defines the relationship of CO₂ emissions. If this relationship is explained, there are two approaches. The first approach is health tourism, which increases the economic growth of the developed country and raises the per capita income level. However, as mentioned before, increasing per capita income increases energy consumption and causes CO₂ emissions.

The second approach, on the other hand, increases the health tourism activity by increasing industrialization activities by negatively affecting human health and directing them to receive health services. There are indirect effects between health tourism and CO₂ emissions. For example, an individual who leaves his/her home country and visits another country in order to receive health care travels by a long way. This transportation is usually done by plane. For this reason, transportation by plane causes an increase in CO₂ emissions, leading to an increase in air pollution. There are chain effects that cause an increase in the environmental crisis in the world. Therefore, local health services need to be increased. In addition, tourists who come to the country engaged in health tourism stay for at least 3 weeks. While benefiting from different activities in these 3 weeks, it causes an increase in the carbon footprint. Generally, health facilities or other places that provide health tourism are places with a large population. In addition to the activities of this crowded population, the activities of health tourists are added, and the amount of CO₂ emissions intensifies and pollutes the environment. The amount of energy consumed and the amount of waste produced by health facilities have the highest share in the country's share. For this reason, the increasing number of patients due to health tourism also indirectly increases the carbon footprint by increasing the amount of energy and the amount of waste produced.

As a result, economic growth causes CO₂ emissions. Economic growth has positive effects in terms of raising the welfare level of countries. However, economic growth also has a negative effect by increasing CO₂ emissions. Because the industrialization activities of especially developed countries have increased. These increasing industrialization activities have led to an increase in CO₂ emissions by consuming too much energy and using fossil fuels, which are dirty energy sources. In addition, the increasing population caused the destruction of forest areas and increased energy consumption. In addition, with the economic growth, the per capita income of individuals has increased, which has increased energy consumption with more comfortable needs, unlike their basic needs. In this context, air pollution due to increased CO₂ emissions has increased and adversely affected human health (Bhuiyan et al., 2022; Ermiş & Güven, 2022; Kou et al., 2022; Xu et al., 2022). Therefore, the negative impact of human health has increased the need for health services. In this direction, service exports, called health tourism, have been created in order for individuals who cannot receive adequate health services in their own country to benefit from other countries. Health tourism, on the other hand, has an important share for countries to gain competitive advantage. Because the share of health tourism increases economic growth by providing income to the country's economy or by providing employment opportunities.

9.4 Conclusion

As a result, the evolution of the use and meaning of transparency is more relevant to transnational organizations and non-governmental organizations. Therefore, it can be said that the phenomenon of transparency, whether invented by a particular person or not, has become more popular as a result of the interconnectedness and networking of supranational organizations. However, despite all its contributions and benefits, transparency is still a controversial concept. Given the novelty of the concept, the confusion over its many meanings, and the conflict between privacy and confidentiality, some elected officials, executives, and analysts may overlook transparency. For this reason, it is necessary to monitor the implementation of the transparency principle with a good control.

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