

Article

Profile of a Sustainable Manager from the Perspective of Pro-Ecological and Pro-Social Management of Energy Company

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Abstract: The objective of the paper is to present an original (own) concept of a model profile of a sustainable manager from the sustainability perspective and then confront this model profile with the opinions of managers employed in energy companies. This problem domain has not been reflected in the scientific literature. Sustainable managers are the ones who are fully prepared to implement the principles of sustainability in energy companies, respecting the principles of sustainable management. Their activity can, to a considerable extent, accelerate sustainable development. According to the model profile, a sustainable manager should be sensitive to ecological and social problems; be knowledgeable about sustainability and demand the same from subordinates; comply with ethical standards; implement pro-environmental and pro-social innovations; and also plan, organize, motivate, and control the contribution, in this way, to sustainable development. Research was conducted aimed at discovering the views/opinions of energy companies' managers pertaining to the above-specified model profile of a sustainable manager. As the research demonstrates, managers assign various significance to the analyzed traits and actions. The largest number of managers recognized the following to be the most important for them: compliance with ethical standards (86.1%), planning and organizing in accordance with the principles of sustainable development (52.8%), and being knowledgeable about sustainable development (38.9%). The paper contributes to the trait theory of leadership and the theory of sustainable management. It is also of practical value—it can prove useful in the processes of educating, recruiting, and evaluating sustainable managers.

Keywords: sustainable manager; profile; traits; sustainable management; energy company

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1. Introduction

The growing number of ecological and social problems deteriorates the condition of our planet, thus creating a threat to future generations' existence. The Earth is losing its potential and heading toward the limits of nature's tolerance. In the past 50 years, the impact of human enterprise and human numbers on the Earth has been devastating. We are living in a time of peak consumption and peak waste [1]. The majority of producers and consumers, also in the energy sector, ignores the threats resulting from a deteriorating condition of the Earth and its diminishing potential. They behave as if they live in the world without any boundaries. They exploit excessively natural resources, consume energy and water, and pollute the environment. This is confirmed by research showing that corporate involvement in the sustainable development goals is still limited. The involvement is largely symbolic and intentional, rather than substantive [2]. As a result, sustainable development does not keep pace with the rate and scale of growing ecological and social problems. Sustainable development, also in the energy sector, can be largely accelerated by sustainable management. This is an extremely valuable developing concept of management, which, as S. Cohen claims, is presently in its infancy [3]. Efficient implementation of sustainable

management in energy companies depends on managers they employ. Particularly useful in this scope are so-called sustainable managers. Sustainable organizations require sustainable leadership [4]. To save the Earth, we will need expert managers to recognize great ideas, turn them into products, and figure out how to sell those products to the mass market [5]. The theory of sustainable managerial leadership, which is part of sustainable management, is also in the initial stage of its development.

Presently, the sustainable development of energy companies is not satisfactory, and this stems from the fact that these organizations lack managers who are committed to the issue of sustainability. M. Epstein and A. Buhovac emphasize how the research demonstrates clearly that an effective implementation of the sustainability strategy occurs when top management becomes involved in it [6]. In multiple cases, an effective implementation of the sustainability strategy does not occur, as managers are not knowledgeable enough and are not involved in this process. R. Eccles and G. Serafeim recognize the lack of competencies to be one of the principal barriers of sustainability strategy development. According to the researchers, new strategies that are associated with environmental and social challenges require new qualifications [7]. Sustainable managers possess such qualifications and knowledge and are also committed to become involved in sustainable development. This type of manager is the most appropriate one to undertake actions that consist in effective implementation of sustainability principles in energy companies, and what follows transforming them into sustainable energy companies. A serious barrier in executing this task is the fact that a model of a sustainable manager does not exist. The trait theory of leadership and the theory of sustainable management have not developed such a model so far.

The sustainable manager is a new type of manager who combines skills in the area of management and the ones in the field of sustainability. As the conducted literature review demonstrates, desirable traits and behaviors of an expert in management have been described extensively in the scientific literature. Therefore, they are not discussed in detail in this paper. It is obvious that every sustainable manager should possess them. However, the literature lacks findings on desirable traits and behaviors of a sustainable manager in the area of sustainability. Thus, we are formulating the following research problem: what traits should sustainable managers possess and in what areas should they act from the sustainability perspective to make their enterprises contribute to sustainable development? This problem has not been reflected properly in the scientific literature. The objective of the paper is to present an original (own) concept of a model profile of a sustainable manager from the sustainability perspective, and then confront this model profile with the opinions of managers employed in energy companies.

The term “manager” is used in the paper with reference to all employees on managerial positions in energy companies. These positions pertain to the top, middle, and supervisory levels of management. In the opinion of the authors of the paper, each manager, including chief executive officer, should be a sustainable manager. Only then can a full transformation of the currently functioning energy companies into sustainable energy companies be possible. Sustainable energy companies are enterprises of the future that fully contribute to sustainable development. In companies of this type, each employee of the managerial level complies with the conditions defined in the model profile of a sustainable manager. The key role in transformations of energy companies into sustainable energy companies is played by chief executive officers. They make the most important decisions pertaining to the operation of the company, including the decisions on staffing managerial positions, which should constitute sustainable managers. Thus, CEOs have a determining influence on the pace and course of transforming their companies into sustainable energy companies.

The model profile of a sustainable manager refers to all types of energy companies, including energy production companies, energy distribution companies, and energy services companies. Each of these companies, regardless of the type and scope of its operation, should contribute to sustainable development. It is obvious that, currently, the possibilities of contributing to sustainable development can be limited in various energy sectors. How-

ever, even in such cases, sustainable managers prove significantly useful: they constantly search for pro-ecological and pro-social solutions in all the areas of their companies' functioning. They either implement such solutions instantly or plan to implement them in the future, contributing in this way to the development of the culture of sustainability in their organizations. This leads to an increase in the sustainability level of energy companies and creates conditions that favor transforming them into sustainable energy companies.

In this paper, the model profile proposed for a sustainable manager in the sustainability area can be, to a large extent, recognized as a universal one. This means that it can be utilized not only in the energy sector, but also in other sectors of the economy. However, it is important that such revolutionary concepts originate just in the energy sector, which contributes significantly to generation of ecological and social threats.

In the next part of the paper, we present a model profile of a sustainable manager in the sustainability area. Next, we demonstrate in the literature review, that such a profile has not been developed and presented in the scientific literature. Another part of the paper presents the results of the research, which consisted in presenting this model profile to energy companies' managers and discovering their views about it. While conducting the research, we also assumed that energy companies' managers would provide their creative contribution into this profile, suggesting considering in it additional traits and actions of a sustainable manager, which the profile had not included/considered. The final part of the paper presents the conclusions and discussion pertaining to the analyzed domain.

The paper contributes to the trait theory of leadership and the theory of sustainable management. It is also of practical value—it can prove useful in the processes of educating, recruiting, and evaluating sustainable managers for the purposes of the energy sector.

1.1. Model Profile of a Sustainable Manager in the Sustainability Area

Sustainable managers feel responsible for the condition of the planet they live on and on which their energy companies operate. They are eager to act for the benefit of future generations in order to make them able both to survive and develop. They also understand and accept concepts of sustainable development. These managers are aware of the fact that sustainable development is supposed to counteract both the ecological threats (atmosphere pollution, water contamination, greenhouse effect, etc.) and the social ones (poverty, unemployment, social diseases, exploitation, etc.). They are characterized by high sensitivity to these problems, thus raising their concern and inciting them to take steps to eliminate them.

Model traits of sustainable managers and their activity areas in the field of sustainability are presented in Table 1.

Table 1. Characteristics and main areas of manager's activity in the area of sustainability.

Sustainable Manager			
Sustainable manager's characteristics conducive to commitment to sustainable development			
Ecological sensitivity	Sensitivity to social problems	Being knowledgeable about sustainability	Compliance with ethical principles
Main areas of activity of a sustainable manager in the field of sustainability			
Implementing innovations in the scope of sustainability			
Requiring subordinates to extend their knowledge about sustainability			
Motivating subordinates to comply with sustainability principles			
Planning and organizing work in accordance with sustainability principles			
Controlling compliance with sustainability principles			

Source: own research.

Sustainable managers are highly knowledgeable about sustainability. This knowledge pertains primarily to the types and scale of ecological and social threats that occur in their regions, countries, and worldwide, as well as the means of eliminating them. They also know what ecological and social problems their energy companies cause and how it is possible to gradually eliminate them. Sustainable managers also require that their subordinates possess the knowledge in the scope of sustainability. This will not only make them understand and accept orders of their managers pertaining to pro-ecological and pro-social actions, but also will facilitate the search for new possibilities of contributing to sustainable development at their working place.

Sustainable managers act ethically in the domain of sustainability. They do not simulate actions in this domain only to strengthen the image of their company on the market. They are aware that unethical behavior leads to moral damage and stress. The outcome of stress is tiredness, drop in work satisfaction, lower motivation, and increased rotation. Therefore, sustainable managers strive to comply with the guidelines of deontology (science of moral responsibilities).

Another important trait of sustainable managers is their innovative abilities. As R. Lussier stresses, innovativeness is implementing new ideas. These ideas refer to new products (product innovation) or new ways of manufacturing products (process innovation). New concepts are a result of creativity, so creativity leads to innovativeness [8]. In energy companies, sustainable managers endeavor to acquire and implement innovative solutions in the area of sustainability, in the field of generating, transmitting, and using electricity.

Sustainable managers govern in accordance with sustainable management principles, so they plan, organize, motivate, and control by considering not only the economic goals, but also the ecological and social ones [9].

Sustainable managers plan the operation of energy companies in accordance with sustainability principles. Planning organizes and reinforces the activity of energy companies on the path toward sustainable development. If strategic, tactical, and operational plans do not allow for such actions, it will remain passive in the area of solving ecological and social problems. Undertakings in this area will not be implemented or will occur occasionally beyond the mainstream of their activity. Planning makes the activeness for sustainable development an integral part of an energy company functioning. Plans cause that the arrangements they include, which pertain to sustainable development, are implemented, as they take the form of obligatorily valid documents.

Organizing the operation of an energy company by a sustainable manager consists mainly in acquiring and allocating sustainable resources, and also organizing the work of subordinates in accordance with the principles of sustainability. Sustainable resources are created by sustainable employees and safe, durable, and economical production equipment. Organizing work based on sustainability principles requires, among other things, implementing “zero-accident” systems, creating a friendly “green” working environment, implementing “work-life balance” programs, implementing health-promotion programs, and practicing age management (making proper use of the potential of different age groups).

Sustainable managers motivate their subordinates to comply with sustainability principles. For this reason, they use a wide range of cash and non-cash impact tools. Examples of these are diplomas, bonuses, cash rewards, and prizes for achievements in the sustainability area.

Sustainable managers control activity in the area of sustainability. This control is supposed to monitor pro-ecological and pro-social actions conducted in energy companies, and, if necessary, make corrections.

Defined in such a way, a model profile of a sustainable manager has been confronted with the opinions of energy company managers. The research conducted among these managers has discovered their attitude to the model profile of a sustainable manager, and more precisely, which of the traits and activities of a sustainable manager are in their opinion more and less important. The development of a model profile of a sustainability manager is highly relevant, not only from the scientific, but also practical point of view.

Such a profile is indispensable in the processes of educating, recruiting, and evaluating sustainable managers.

1.2. Literature Review

The objective of the literature review was to search for scientific publications that present model profiles of a sustainable manager from the perspective of sustainability. The authors have conducted extensive literature studies based on, among other things, publications in the scope of management, sustainable management, sustainable business, sustainable human resource management, and sustainability, from the period of last 10 years. The conducted literature review demonstrates that the center of interest in the case of management sciences is the traits and behaviors of managers, not sustainable managers. Managers are experts in the area of management, while sustainable managers are experts not only in the area of management, but also in the area of sustainability. The authors of the present paper were particularly interested in the traits and activities of sustainable managers, with the stress on the area of sustainability.

In the scientific literature, one can find numerous papers pertaining to traits and behaviors of managers. This is understandable, given the fact that these traits and behaviors condition the quality of management and its effects. The most desirable traits and behaviors of managerial leadership are searched for primarily through developing the trait theory of leadership, the behavioral theory, and the situational approach. However, the relationship of these traits and behaviors with sustainable development is vague or does not occur at all, a proof of which are the examples of the presented and analyzed below publications. Therefore, the issue of developing a model profile of a sustainable manager from the perspective of sustainability still remains unsolved.

According to Ch. Achua and R. Lussier strongly supported in the research are the following traits of effective leaders: dominance, high energy, internal locus of control, integrity, flexibility, self-confidence, stability, intelligence, and sensitivity to others. Especially difficult to achieve is charismatic leadership. Traits of a charismatic leader indicated by these leaders include vision, superb communication skills, self-confidence and moral conviction, ability to inspire trust, high risk orientation, high energy and action orientation, relational power base, minimum internal conflict, ability to empower others, and self-promoting personality [10].

Each manager should strive to be an authentic leader. R. Daft and D. Marcic claim that authentic leaders pursue their purpose with passion, practice solid values, lead with their hearts as well as their heads, establish connected relationship, and demonstrate self-discipline [11].

A desirable type of managerial leadership is transformational leader. In the opinion of R. Daft and A. Benson, what distinguishes transformational leaders is their special ability to bring about innovation and change by recognizing followers' needs and concerns, providing meaning, challenging people to look at old problems from a new perspective, and acting as role models for the new values and behaviors [12].

The character of a manager significantly impacts their behaviors in an organization. G.H. Seijts and K. Young Milani relate character to the creation and sustainment of organizational cultures of equity, diversity, and inclusion. Character is not a subjective amorphous entity but manifests as a set of observable behaviors also in the activities of leader [13].

Creativity is deemed to be an important trait of a manager. V. Thac Dang, M. Nguyen Lisovich, T. Vo-Thanh, J. Wang, and N. Nguyen analyze the relationship between workplace learning and frontline managers' creativity in the hospitality industry, with the mediating roles of knowledge sharing and cognitive flexibility. Their research shows that workplace learning is positively related to frontline managers' creativity and that knowledge sharing has a positive mediating effect in the relationship between workplace learning and frontline managers' creativity [14].

Some managers possess narcissistic traits that may hinder management. Y. Choi Wei Ming and J. Phan have established how narcissistic leaders behave toward their subordi-

nates and what the outcomes of these interpersonal work relationships are. Understanding of narcissism and how it unfolds in work can help organizational leaders recognize the caveats linked to a narcissistic personality; it can also help those who work for/with narcissistic leaders to prepare themselves better for interactions with these leaders and to adjust their expectations about such leaders [15].

F. Cavazotte, J. Mansur, and V. Moreno explain how authentic moral and selfless stance of leaders influences safety. They claim that leader morality and selflessness can influence safety outcomes in two ways: by increasing frontline employees' psychological capital and organizational citizenship [16].

A vital role in acquisition of appropriate managerial traits and skills is played by leadership development programs. B. Crane states that a number of leadership development programs are not producing their intended results, and that a majority of first-time managers are not effective. Building on leadership mindset research, he presents recommendations to help organizations in a better selection and training of new managers [17].

Equally important is the managers' personal development, which impacts their future behaviors. X. Jiang, S. Xu, and J.D. Houghton have examined why people develop themselves for leadership positions. They have identified variations in leader self-development patterns for leadership positions within the investigated organizations. The results of their research show that individual perceptions of leadership have a strong effect on the process of leader's self-development [18].

The research on the traits and behaviors of managers, the examples of which have been demonstrated above, does not solve the problem, which is determination of a model profile of a sustainable manager. As it has been stressed in the introduction to the paper, a sustainable manager constitutes a combination of an expert in management and an expert in the area of sustainability. Therefore, it is not enough for a sustainable manager to possess only the model traits resulting from the previous theories. Such persons need to hold certain attributes that will enable them to act efficiently in the sustainability area. A consistent concept that defines the profile of a sustainable manager, which considers their attributes in the sustainability area, has not been developed yet. Some publications link the activity of managers to sustainable development, and directly or indirectly refer to their traits. However, the proposed solutions are either too general or incomplete. Here are several examples of such findings.

The considerations of S. Cohen demonstrate the following about sustainable managers [3]:

- Want to be responsible for the health of the Earth,
- Act for the benefit of future generations to make them able not only to survive, but also to develop,
- Concentrate on the future,
- Are sustainability-oriented, which is more relevant to them than an increase in production and consumption,
- Strive to control the impact of their actions onto man and environment,
- Strive to minimize the negative impact of their actions on the planet.

A slightly different grasp has been proposed by J.A. Carbo, V.T. Dao, S.J. Haase, M.B. Hargrove, I.M. Langella. In their opinion, socially sustainable leadership includes the following traits [4]:

1. Compassion (the ability to recognize the needs of others and the ability to openly love and respect one's followers).
2. Honesty (honest leaders tell the truth and do not deceive others).
3. Fairness (socially sustainable leadership demands a sense of fairness and a deep concern for justice).
4. Commitment (leaders must have fortitude, willpower, and hope to sustain their commitment).
5. Prudence (prudent leaders think before they act; they have the ability to gather, assess, and process information).

E. Auvinen, M. Huhtala, U. Kinnunen, H. Tsupari, and T. Feldt have examined leaders' motivation to lead as a personal resource for building a sustainable career. Making use of the person-oriented methodology, they have identified various latent profiles of leadership motivation [19].

A.E. Eide, E.A. Saether, and A. Aspelund concentrated on the relationships between leaders' personal motivation toward sustainability, their intellectual leadership for sustainability, and organizations' sustainability strategies. They have demonstrated, among other things, that intellectual leadership partly mediated the relationship between leaders' personal motivation for sustainability and their firms' sustainability strategies, which indicates that personal motivation influences firm strategy through executives' leadership behavior [20].

X.A. Shinbrot, K. Wilkins, U. Gretzel, and G. Bowser investigated the perceptions of male and female sustainable development activists regarding existing barriers and also the unique contributions women leaders bring to the development when these barriers are overcome. Their research reveals complex and often hidden issues, such as the lack of self-confidence, which hampers women from accessing leadership positions [21].

H. Pham and Soo-Yong Kim claim that sustainable construction practices positively affect sustainability performance. However, the understanding of leadership and its linkage to sustainable construction are still limited; thus, more work is required to establish the leaders' vital role in the implementation of sustainable practices [22].

R. Cole and B. Snider believe that undergraduates (future managers) and executive MBA students (current managers) need sustainability embedded in their management education. Sustainability in management education promotes alternate approaches to managing turbulence [23].

As the conducted literature review demonstrates, scientists devote considerable attention to traits and behaviors of managers, yet their focus on sustainable managers is only marginal. The literature lacks publications that present model profiles of a sustainable manager from the perspective of sustainability. This perspective is of particular importance as only managers competent in the area of sustainability will be truly contributing to sustainable development of their energy companies. Thus, in science, sustainable science, in particular, and also in business practice, there exists a gap that the authors of the present paper fill in by creating a model profile of a sustainable manager from the perspective of sustainability.

Activity of managers and sustainable managers can be analyzed in a broader context, which is management. The analysis of scientific achievements in this area, pertaining to the energy sector, reveals even a greater gap than a lack of the profile of a sustainable manager. Although the literature is abundant in publications pertaining to management in the energy sector, especially about energy management [24–27], it lacks papers devoted to sustainable management of energy companies. This bears several negative consequences. To begin with, management of the energy sector is lagging behind the most progressive from the sustainability perspective management direction. In addition, the lack of sustainable management in energy companies delays their sustainable development. Finally, without sustainable management, it is not possible to transform them in the future in sustainable energy companies.

2. Research Method

The authors of the present paper adopted the following research procedure: (1) determining a model profile of a sustainable manager; and (2) discovering the opinions about their profile, expressed by energy companies' managers. The model profile of a sustainable manager is presented in the second part of the paper. It was developed by the authors, being their own original concept. The second stage of the research process required conducting empirical research.

The research's objective was to discover the views/opinions of energy companies' managers that pertained to a model profile of a sustainable manager, which facilitates their efficient operation in the area of sustainability.

To achieve the determined research objective, we drew up a plan of the research, conducted the research, summarized its results, analyzed them, and then formulated conclusions. The research was conducted in the second half of 2021. It covered managers of energy companies employed at various management levels. Due to the ongoing pandemic (COVID-19), we refrained from face-to-face contact with managers. Instead, we used the survey method. The research tool constituted a survey questionnaire. To discover the opinions of the managers pertaining to the profile of a sustainable manager, we used the five-point scale. One of the questions was an open-ended one: what other significant criteria should a manager meet in your opinion to make their company contribute to sustainable development? This allowed for free answers, and therefore discovering the opinions and views that are beyond the subject scope included in the questionnaire.

The authors of the paper concluded that the selection of the survey method and research tool, based on a 5-point scale, would allow us to obtain reliable research results. In this case, the primary focus was to make the survey directed at the managers fully understandable by them and filling it in was easy to them. In this way, we obtained primary information (first-hand), which reflected the extent to which energy companies' managers accept the traits and activities of sustainable manager, included in its model profile.

The research covered 36 managers (27 men and 9 women), representing 8 energy companies located in various parts of Poland. The companies covered by the research come from the list of available providers of services related to energy consumption. The list has been published by the Polish Ministry of Climate and Environment. It includes 23 companies. Therefore, the number of 8 companies being investigated should be recognized as a representative one. The majority of investigated managers constituted persons aged between 40 and 49 (15 persons), 50 and 59 (9 persons), and 30 and 39 (6 persons). The largest number of managers came from companies of the following numbers of employees: 50–249 (16 persons), 10–49 (11 persons), and above 1000 (6 persons). The managers covered by the research conducted activity at all three management levels (top, middle, and lower). The top management level was represented by 8 persons. The same number of respondents worked at the lower level. In turn, 20 managers were employed at the middle management level.

3. Empirical Results

Table 2 shows the results of the research conducted among the managers of energy companies. In the course of the research, they expressed their opinions about the issues listed in the second column of the table, using the point scale from 0 to 5. The extreme scores of the scale were assigned the undermentioned meanings.

A—0 means that the manager absolutely does not have to be sensitive to ecological problems, while 5 means that the manager's ecological sensitivity should be supreme.

B—0 means that the manager does not have to be sensitive to social problems at all, while 5 means that the manager's social sensitivity should be supreme.

C—0 means that the manager does not have to possess any knowledge about sustainability, while 5 means that the knowledge in this scope should be complete.

D—0 means that the manager does not have to comply with any ethical principles at all, while 5 means that the manager should absolutely comply with them.

E—0 means that the managers do not have to implement in the company pro-environmental and pro-social solutions at all, while 5 means that they should absolutely do this.

F—0 means that the manager does not have to require their subordinates to extend their knowledge about sustainability, while 5 means that the manager should absolutely do this.

G—0 means that the managers do not have to motivate their employees in the area of sustainability at all, while 5 means that the managers should absolutely do this.

H—0 means that, when planning and organizing work, the manager does not have to comply with sustainability principles at all, while 5 means that the manager should absolutely do this.

I—0 means that the manager does not have to control at all whether the subordinate staff act in accordance with sustainability principles, while 5 means that such control is absolutely necessary.

Table 2. Number of answers regarding a sustainable manager's profile (managers in total).

	Scale	0	1	2	3	4	5
A	Ecological sensitivity	0 (0%)	1 (2.8%)	1 (2.8%)	6 (16.7%)	17 (47.2)	11 (30.5%)
B	Sensitivity to social problems	0 (0%)	1 (2.8%)	2 (5.5%)	14 (38.9%)	13 (36.1%)	6 (16.7%)
C	Being knowledgeable about sustainability	0 (0%)	0 (0%)	0 (0%)	3 (8.3%)	19 (52.8%)	14 (38.9%)
D	Compliance with ethical principles	0 (0%)	0 (0%)	0 (0%)	1 (2.8%)	4 (11.1%)	31 (86.1%)
E	Implementing innovations in the scope of sustainability	0 (0%)	0 (0%)	2 (5.5%)	7 (19.5%)	16 (44.5%)	11 (30.5%)
F	Requiring subordinates to extend their knowledge about sustainability	0 (0%)	0 (0%)	2 (5.5%)	14 (38.9%)	16 (44.4%)	4 (11.2%)
G	Motivating subordinates to comply with sustainability principles	0 (0%)	1 (2.8%)	2 (5.5%)	15 (41.7%)	10 (27.8%)	8 (22.2%)
H	Planning and organizing work in accordance with sustainability principles	0 (0%)	0 (0%)	0 (0%)	2 (5.5%)	15 (41.7%)	19 (52.8%)
I	Controlling compliance with sustainability principles	0 (0%)	0 (0%)	3 (8.3%)	7 (19.4%)	19 (52.9%)	7 (19.4%)

Source: own research.

The numbers included in Table 2 represent managers, also in the percentage grasp, who selected a given score on the scale, included in the first row of the column (scale from 0 to 5).

The percentage data included in Table 2 are reflected in Figure 1. The chart also presents the model profile of a sustainable manager. Managers who meet the requirements of the profile should possess all the traits listed in Table 2, at the top level of 5. The chart demonstrates considerable discrepancies between the model profile of a sustainable manager and the opinions of the surveyed energy companies' managers. These discrepancies are discussed in the further part of the paper.

As Table 3 demonstrates, the managers assign various scores to particular traits and actions of a sustainable manager, as listed in the second column. Most managers assigned the top score of 5 to the following traits and actions: compliance with ethical principles (86.1%), planning and organizing work in accordance with sustainability principles (52.8%), and being knowledgeable about sustainability (38.9%). In turn, the smallest number of managers referred the score of 5 to such actions as requiring subordinates to extend their knowledge about sustainability (11.2%) and motivating subordinates to comply with sustainability principles (22.2%). The model profile of a sustainable manager is characterized by the development of particular traits and actions at the top level (Figure 1: model profile). The last column of Table 3 presents the percentage of the managers who, in the scope of particular traits and actions, do not identify themselves with this model solution (do not assign the top score of 5 to particular traits and actions). In their opinion, a sustainable manager is not required to have these attributes developed at the top level (they assign to these traits and actions scores lower than 5). We analyze this problem more profoundly in the further part of the paper, with the consideration of the management level, gender, and age of the investigated managers.

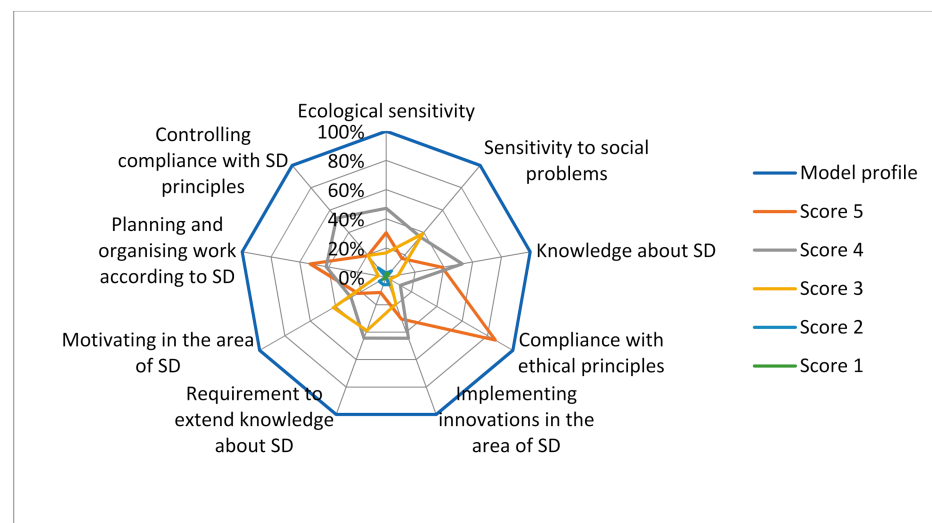


Figure 1. Model sustainable manager profile versus the sustainable manager profile in the opinion of energy companies' managers. SD—sustainable development. Source: own research.

Table 3. Discrepancy in the scope of the model sustainable manager profile and opinions of energy companies' managers.

List		Managers Fully Identifying Themselves with the Model Profile (Score of 5)	Managers Not Fully Identifying Themselves with the Model Profile (Scores 0–4)
A	Ecological sensitivity	30.5%	69.5%
B	Sensitivity to social problems	16.7%	83.3%
C	Being knowledgeable about sustainability	38.9%	61.1%
D	Compliance with ethical principles	86.1%	13.9%
E	Implementing innovations in the scope of sustainability	30.5%	69.5%
F	Requiring subordinates to extend their knowledge about sustainability	11.2%	88.8%
G	Motivating subordinates to comply with sustainability principles	22.2%	77.8%
H	Planning and organizing work in accordance with sustainability principles	52.8%	47.2%
I	Controlling compliance with sustainability principles	19.4%	80.6%

Source: own research.

Figure 2 presents the percentage of the managers in the breakdown into management levels. Their views about particular traits and actions of a sustainable manager comply with the model profile (score of 5).

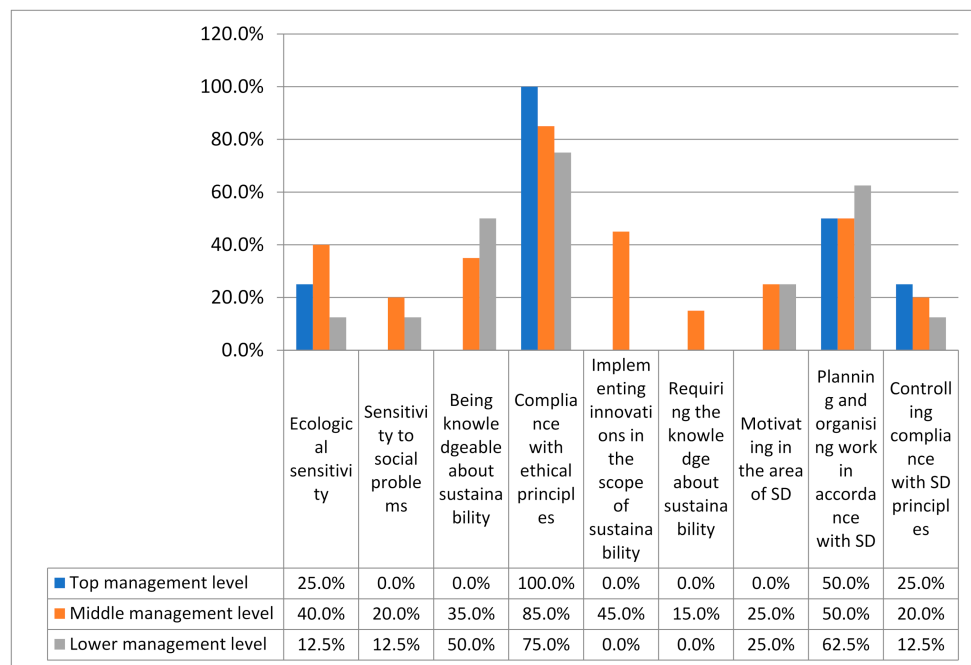


Figure 2. Energy companies' managers in breakdown into management levels. Views about particular traits and actions of a sustainable manager compliant with the model profile (scores of 5). SD—sustainable development. Source: own research.

Figure 2 allows us to indicate the management level with the top percentage of managers who prefer most (score of 5) a given trait or activity of a sustainable manager. The managers in the top management level dominate in the case of the two following actions: compliance with ethical standards (100%) and controlling subordinates' compliance with sustainability principles (25%). The managers in the middle management level gained an advantage with reference to 5 traits and actions: ecological sensitivity (40.0%), sensitivity to social problems (20.0%), implementing innovations in the scope of sustainability (45.0%), requiring subordinates to be knowledgeable about sustainability (15.0%), and motivating in the scope of sustainable development (25.0%). In the case of motivating, the same score is assigned to the lower management level (25.0%). The remaining two attributes of a sustainable manager that are especially preferred by the managers of the lower management level include being knowledgeable about sustainability (50.0%) and planning and organizing work in accordance with sustainability principles (62.5%).

Now we are going to examine whether there are any differences in the opinions pertaining to most desirable traits and actions of a sustainable manager with regard to male and female managers. Figure 3 demonstrates the percentage of the managers in the breakdown into men and women. Their views about particular traits and actions of a sustainable manager comply with the model profile (score of 5).

As Figure 3 demonstrates, a high correlation of views of men (29.6%) and women (33.3%) pertaining to the most desirable (score of 5) traits and actions of a sustainable manager occurs only in the case of ecological sensitivity. The greatest differences in the views occur for such traits and actions as planning and organizing work in accordance with sustainability principles (men—59.2%, women—33.3%), implementing innovations in the scope of sustainability (men—37.0%, women—11.1%), and being knowledgeable about sustainability (men—44.4%, women—22.2%). As the data demonstrate, women attach less importance to all three abovementioned attributes of a sustainable manager.

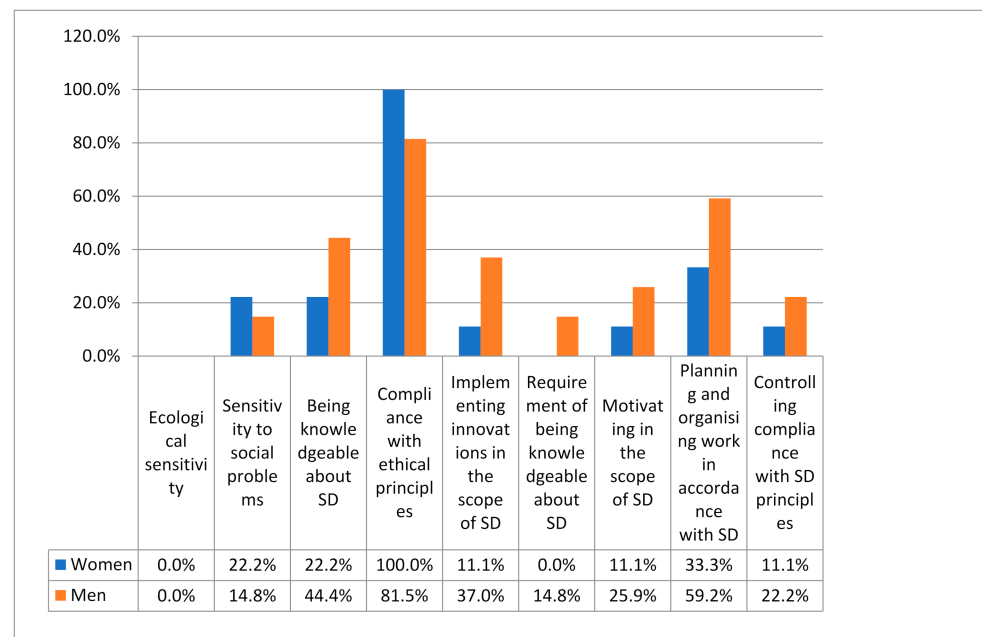


Figure 3. Energy companies’ managers in breakdown into men and women. Views about particular traits and actions of a sustainable manager compliant with the model profile (scores of 5). SD—sustainable development. Source: own research.

It is also worth analyzing the differences in views pertaining to the most desirable traits and actions of a sustainable manager with regard to the age of the managers. This problem is illustrated in Figure 4.

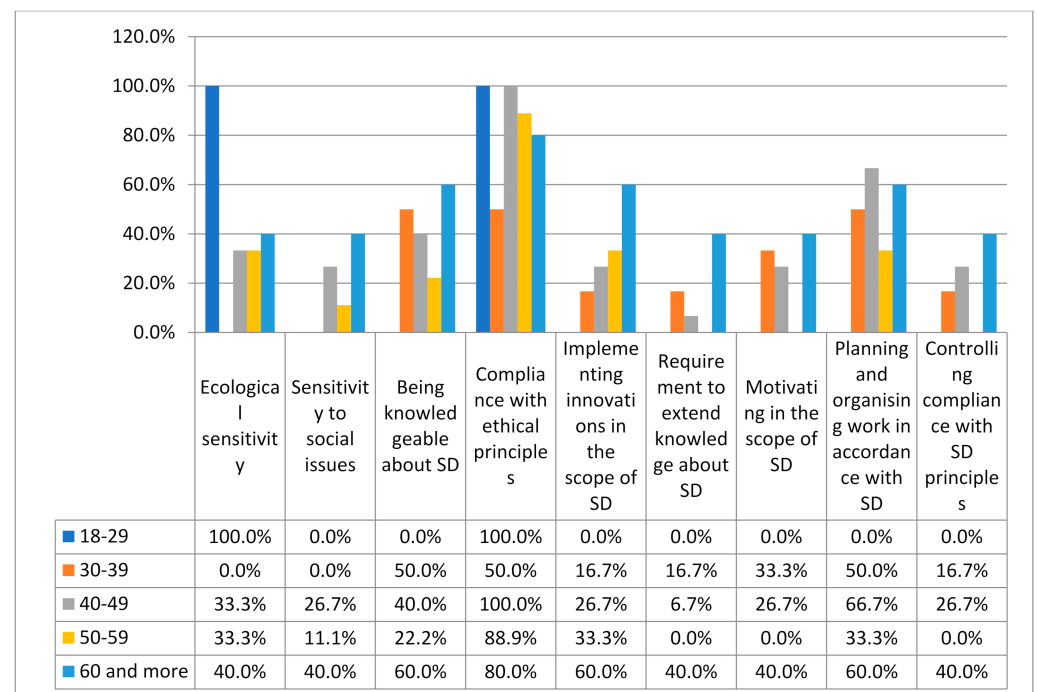


Figure 4. Energy companies’ managers in breakdown into age categories. Views about particular traits and actions of a sustainable manager compliant with the model profile (scores of 5). SD—sustainable development. Source: own research.

As it can be observed in Figure 4, the following traits of a sustainable manager have most proponents in the undermentioned age categories.

- Ecological sensitivity: 18–19 years old (100.0%);
- Sensitivity to social problems: 60 and more years old (40.0%);
- Being knowledgeable about SD: 60 and more years old (60.0%);
- Compliance with ethical principles: 18–29 years old (100%), 40–49 years old (100%);
- Implementing innovations in the scope of SD: 60 and more years old (60.0%);
- Requiring to extend knowledge about SD: 60 and more years old (40.0%);
- Motivating in the scope of SD: 60 and more years old (40.0%);
- Planning and organizing work in accordance with SD: 40–49 years old (66.7%);
- Controlling compliance with SD principles: 60 and more years old (40.0%).

In the above summary, the largest share represent the managers aged 60 and more (6 out of 9 cases). Managers from this age category usually have long seniority and experience of many years in the scope of management. They set higher requirements for sustainable managers compared to the younger managers.

The managers were also asked the following open-ended question: what other significant criteria should managers meet, in your opinion, to make their company contribute to sustainable development? The obtained answers are specified below.

1. “Knowledge and experience in the scope of managing human resources, communication, psychology, trade”;
2. “Should be consistent in their actions”;
3. “Limiting the consumption of toxic and hazardous substances”;
4. “Set good personal example of such an activity”;
5. “Ensure proper communication in this scope in the organization”;
6. “Manager should be knowledgeable and be an example to follow in such actions for the subordinates”;
7. “Good quality of education, proper consumption and production”.

Setting a good personal example for the subordinates and taking consistent actions in the area of sustainability are surely considerable requirements that facilitate sustainable managers’ achievement of the set goals. Equally important factors constitute proper knowledge in the scope of management achieved at various levels of education and practical actions.

4. Conclusions and Discussion

Sustainable management of the energy sector is at the initial stage of its development. The trait theory of leadership pertaining to sustainable managers is only just being developed. It lacks a model profile of a sustainable manager in the area of sustainability. This is a research gap, which the authors of the present paper fill in by presenting an original concept of such a profile. Defining a model profile of a sustainable manager in the area of sustainability contributes not only to the science, but also practice. With the use of such a profile, it is possible to identify, recruit, and evaluate sustainable managers, as well as to educate them for the purposes of energy companies. The lack of such a profile makes these activities much more difficult.

The authors of the present paper believe that sustainable managers in the scope of sustainability should be sensitive to ecological and social problems, be knowledgeable about sustainable development and require such knowledge from their subordinates, comply with ethical principles, implement in their companies pro-environmental and pro-social innovations and plan and organize work, and motivate and control compliance with sustainability principles.

The authors of the present paper did not limit themselves to the determination of a profile of a sustainable manager in the area of sustainability. They conducted research that was supposed to discover the opinion on this profile among managers of energy companies. In the course of the research, its participants were provided with an opportunity to enrich the proposed model profile with new elements.

As the research demonstrates, the managers assign various importance to particular traits and actions of a sustainable manager. Most managers recognized as the most important ones the following traits and activities of a sustainable manager: compliance with ethical principles, planning and organizing work in accordance with sustainability principles, and being knowledgeable about sustainability. In turn, the smallest number of the managers recognized as the most important factors: requiring their subordinates to extend the knowledge about sustainability, and motivating subordinates to comply with sustainability principles. It is especially concerning that the managers underappreciate the importance of motivating their subordinates to comply with sustainability principles. Understanding motivation is the key to the successful management of people [28]. At the end of the 19th century, already (in the late 1800s) it was discovered that employees utilize only about 20–30% of their potential at work. High motivation leads to the utilization of this potential in the range of 80–90% [29].

Considering all the management levels, the managers who most prefer (score of 5) the greatest number of traits and behaviors from the proposed model profile of a sustainable manager come from middle management level. Of particular importance for the managers of middle management level are the following traits and actions of a sustainable manager: ecological sensitivity, sensitivity to social problems, implementing innovations in the scope of sustainability, requirement of subordinates to be knowledgeable about sustainability, and motivating in the scope of sustainability.

The research demonstrates that women managers attach less importance to the following attributes of a sustainable manager when compared to male managers: planning and organizing work in accordance with sustainability principles, being knowledgeable, and implementing innovations in the scope of sustainability. This difference results primarily from a softer attitude of women to management compared to men. Women are more diligent with regard to interpersonal relations; they create a homelike atmosphere in the workplace; and, in conflict situations, they are more inclined to negotiate [30]. Thus, they may set lower requirements for their subordinates in the scope of sustainability.

With regard to age categories, most of the managers aged 60 and more have indicated the greatest number of traits and actions that are compliant with the model profile of a sustainable manager (score of 5). They include sensitivity to social problems, being knowledgeable about sustainability and extending the knowledge in this scope by the subordinates, implementing innovations in the scope of sustainable development, and motivating to comply with the sustainability principles and controlling this compliance. Senior managers are more experienced in managing companies, including working with subordinates. They have spent a longer time dealing with the problems of growing ecological and social threats. Usually, they understand better than younger generations issues of sustainable development and the effort that is necessary to bring the planned results.

The investigated managers have not indicated any additional factors that could be considered in the list of traits and behaviors that constitute the model profile of a sustainable manager.

Furthermore, in the paper, we indicated the limitations of the conducted research and also presented the proposals of future research related to its problem domain.

A limitation that, to a certain extent, hindered carrying out the research pertains to the knowledge of the investigated managers about sustainable management and sustainability. Managers functioning at various management levels of energy companies, and also the managers being investigated, are usually not deeply knowledgeable about sustainable management and sustainable managers.

This is hardly surprising, as sustainable management is a new and developing trend in the management sciences. There are plenty of such managers who do not possess satisfactory knowledge in the area of sustainability, either. This all makes it difficult for energy companies' managers to evaluate the model profile of a sustainable manager in the area of sustainability. This is also how we explain the fact that the investigated managers

have not provided any additional significant factors to be considered in the list of traits and behaviors that form such a model profile.

Another limitation pertains to the pro-ecological and pro-social level of the investigated managers. This level is included between two extremes. The former is full support of sustainable development; the latter, in turn, is a complete lack of support, meaning negating its ideas and principles. Those managers who support sustainable development will more thoroughly evaluate the model profile of a sustainable manager in the area of sustainability than those who negate the need for such a development.

The information included in this paper can constitute inspiration for further research. The more important directions are presented below.

Apart from the energy industry, there are multiple sectors of the economy that have their own specificity. Should we strive to develop a single universal profile of a sustainable manager or develop various profiles that are adjusted to the specificity of each sector? We believe that there should be a single model profile of a sustainable manager of universal nature that is filled with detailed contents pertaining to a specific trade.

The issue of the universality of the model profile of a sustainable manager can also be referred to at different management levels. In this case, there is also no need to develop distinctive model profiles for managers of top, middle, and lower management levels of the company. The universal model profile of a sustainable manager will be, in this case, filled with detailed contents in adjustment to the management level occupied by a given manager.

Another problem regards working out evaluation methods, the aim of which is to determine to what extent a given manager complies with the requirements resulting from the model profile of a sustainable manager. This is of great importance, for example, during the process of recruiting candidates for the positions of sustainable managers in energy companies. In our opinion, it is most important for candidates to provide documentation of their previous achievements in the scope of sustainability (completed studies in the scope of sustainability, courses, training, achievements in the scope of sustainability from previous positions, participation in ecological and social campaigns, voluntary work, etc.). Candidates can also be tested, interviewed, and their behaviors can be analyzed during the probation period.

A very relevant issue is developing a system of education that will provide the economy with sustainable managers. Its objective would be to educate sustainable managers from scratch for the needs of various economy sectors, including the energy sector (primary, secondary, and higher education), and also training for managers currently employed in companies intended to transform them into sustainable managers. For such a system of education to function properly, it is indispensable that the model profile of a sustainable manager has been developed.

Previous achievements of sustainable development are not satisfactory. The increasing ecological and social problems pose a threat to human existence. As Arnold Pabian claims, in order to stop the destructive human activity on Earth, it is necessary to move quickly from the state of deep unsustainability to a state of mass sustainability [9]. An important step on track to achieve the state of mass sustainability is to staff executive positions in companies with sustainable managers.

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