

# Leading Energy Efficiency Change

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**Abstract:** - The growing importance of the energy efficiency question has led many executives to modify their energy policies. Energy efficiency is integrated into business strategy. The integration of energy efficiency and “green” issues in the enterprise system thinking and in the business policy has significant environmental, social, financial, managerial and organizational implications for the corporate system, thus requiring firms to re-design their business philosophy and culture, value chain activities and processes. Integrated system approach integrates the requirements of energy efficiency with all other business requirements. Energy efficiency and “green” innovation in management and technologies and how they are applied are key to enabling corporate to create new business values while also benefiting stakeholders, people and the planet as whole. In recent years, enterprises have been upgrading their efforts towards sustainable acting from environmental prevention to integrated approaches that take into account product lifecycles and wider impacts. Energy efficiency helps to enable this evolution through a combination of “soft” non-technological (culture, habits, management and leadership approach) and “hard” technological changes that can yield substantial environmental and energy efficiency improvements. The environmental challenge and energy efficiency must be seen as a major source of managerial change.

**Key-Words:** *Business, Environment, Energy Efficiency, Management, Organization Model*

## 1 Introduction

The successful green development and implementation of green innovation in an organizational system can produce a significant saving (energy) in the amount of business and environment resources and therefore a smaller environmental impact. Integrated system approach integrates the requirements of sustainable green development and environmental excellence with other business requirements. European Foundation of Quality Management (EFQM) is helping to prepare a new generation of business leaders by offering training and development opportunities built on practice-based learning and exchange between organizations. Excellent organizations can operate in different environments, with different stakeholder constituencies, and come in all shapes and sizes but what they do have in common is a mindset based on eight Fundamental Concepts of Excellence according to EFQM [1].

Leading global corporation are embracing sustainable business development as a strategic framework for integrating their business enterprises, creating innovative solutions to the complex needs and requirements of the business environment, and thinking strategically about leading change. The theory on the basis of the practical experiences envisages

sustainable development planning as a process of continuous improvement and green innovations. Consequently, following a holistic approach to competitiveness, it is of utmost importance to consider all the relevant factors of competitiveness. These factors could be subdivided into systemic thinking, production processes management, sustainable management and business/environmental excellence. Modern trends requiring systems thinking and integrated system approach to sustainable business excellence. The EFQM Excellence Model is a practical, non-prescriptive framework that enables organizations to: assess where they are on the path to excellence; helping them to understand their key strengths and potential gaps in relation to their stated Vision and Mission as well as to integrate existing and planned initiatives, removing duplication and identifying gaps. Leaders of successful, high-growth companies understand that green innovation is what drives growth, and innovation is achieved by awesome people with a shared relentless growth attitude and shared passion for problem solving and for turning ideas into realities [2]. The fundamental concepts of excellence are:

1. Achieving Balanced Results
2. Adding Value for Customers

3. Leading with Vision, Inspiration and Integrity
4. Managing by Processes
5. Succeeding through People
6. Nurturing Creativity and Innovation
7. Building partnerships
8. Taking Responsibility for a Sustainable Future

## 2 Organizational effectiveness and efficiency

Effectiveness refers to the degree to which a planned effect is achieved. Planned activities are effective if these activities are realized. Similarly, planned results are effective if these results are actually achieved. For example, an effective process is one that realizes planned activities and achieves planned results. Similarly, an effective set of characteristics or specifications is one that has the potential to realize planned activities and achieve planned results

Efficiency is a relationship between results achieved (outputs) and resources used (inputs). Efficiency can be enhanced by achieving more with the same or fewer resources. The efficiency of a process or system can be enhanced by achieving more or getting better results (outputs) with the same or fewer resources (inputs).

Different types of organizations have different fundamental goals and various environmental objectives. Lipovec says that the objectives and aims of the business results that it wants the company (companies) to achieve with your business (operation). In the event of an environmental management company wishes to legal requirements to achieve an environmentally sustainable operation. Throughout managerial process must provide the best possible exercise of objectives. The success of the company most affected by its income and expenditure and assets engaged, but the profitability of the company as a fundamental objective of the company is increasingly mentioned environmental liability companies, which involve the economic performance, which is addressed below thesis. It mainly points out that companies are increasingly coping with all participants in the economy and society as a whole and depend on them; increasingly recognize that development and performance of the company and the world can no longer be achieved only through competition between companies, but increasingly conscious, responsible and moral cooperation between them, says Rozman [2]. Quality management certainly includes stated. Quality requirements are all sharper. The success of companies in a capitalist economy means the profitability or viability, says Rozman and

proceed to the profitability of the relationship between profits and investment; from the perspective of the business owner is that the relationship between profits and investment owners or equity (ROE, or return on equity - ROE), in terms of the company's success profitability of the invested assets (Return on Assets - ROA). He adds that in the long run the depreciation of the same role as profits, so we talk about the return on assets (Return on Investment - ROI). Various aspects lead to the exact definition of society and the principles or dimensions of performance. Because of looking from different perspectives, a precise definition of goals and to determine whether the principle measure of its success, notes Rozman and gives the definition: efficiency is the ratio between the effect and necessary elements and efforts. Efficiency is always, regardless of socio-economic system, present efforts; is a technical term, in contrast to the performance, which is the company's concept.

Organization must ensure its efficient functioning, which leads to the effectiveness of the organization. The efficiency is a means to achieve the fundamental goal, its performance. The company's goal as a company's performance, a fundamental indicator of company performance is return on assets. The aim of the organization of the company's utility value, which embody the products and services. The aim of the organization is to ensure the efficient implementation of business process. An efficient business is therefore rational operations. The aim of the organization is the efficient operations of a fundamental indicator of rationality in the narrow, technical sense, the efficiency, reflected by the ratio of outputs and are engaged business elements (work items, work resources, manpower and foreign services). The business economy (value of outputs compared with the value of all the elements engaged) and productivity (value of outputs compared to the volume consumed time) are indicators of rationality in the strict sense.

According to Rozman [2] is therefore the effectiveness of the relationship between the effect and necessary elements and efforts. At the same time adds to the effectiveness forever, regardless of the socio-economic system, present efforts; is a technical term, in contrast to the performance, which is the company's concept. Often greater efficiency leads to better performance, but it can also be an obstacle. Increased capacity utilization, for example, increase the effects, but if the products are sold by loser is reduced performance. At least in the short term the technical objectives (efficiency, productivity, economy)

subordinate performance (for example, in the capitalist mode of management).

### 3. Approaches within the Environmental Management Model for Energy Efficiency

The environmental management model for energy efficiency consists of 5 phases (execution is added as a separate phase). Each of 5 phases is further divided into specific approaches (steps) that must be carried out systematically and implemented in a manner that takes into account all of the organization's stakeholders. The specific approaches are listed as follows [3].

#### 3.1 Planning the energy efficiency environmental business

The environmental management model searching sustainable business excellence includes the following approaches for planning the sustainable business excellence for energy efficiency:

1. Periodical analysis of organization's internal situation (strengths and weaknesses):
  - Business;
  - Environmental Quality of business;
  - Existing environmental (energy) mission, vision, policies and values;
  - Strategic and tactical goals as well as strategies and tactics from previous period.
2. Periodical analysis of organization's external situation (opportunities and threats):
  - Environment (external influencing factors).
3. Periodical analysis of stakeholders – their goals and past/current/future relationship between the stakeholders and the organization.
4. Environmental (energy) mission, vision, values – the organization forms/updates the mission, vision and values, taking into account all stakeholders.
5. Environmental (energy efficiency) goals – the organization defines:
  - Strategic environmental (energy efficiency) goals (indicators) of business – considering internal in external influencing factors and in cooperation with all groups of stakeholders;
  - Annual (tactical) environmental (energy efficiency) goals (indicators) of sustainable business excellence in cooperation with all groups of stakeholders.

6. Strategies/tactics – the organization defines:
  - Strategies to attain the strategic environmental (energy efficiency) goals;
  - Tactics to attain annual (tactical) environmental (energy efficiency) goals;
  - Processes (key (energy efficiency) processes, supporting environmental (energy efficiency) processes and their sequence) for the accomplishment of strategies and tactics;
  - Process-based environmental (energy efficiency) goals (costs, assets, stakeholders, duration, information, documents etc.).
7. Procedure for planning sustainable business (energy efficiency) excellence:
  - The organization defines the procedure of planning the sustainable business (energy efficiency) excellence, taking into account the time (when to plan), people (who plans), procedure (the sequence of planning phases), documents (regulation) and communication (with all involved);
  - The organization regularly checks the suitability of the planning (energy efficiency) procedure;
  - The organization introduces measures required in case of deviation from the anticipated process of planning (energy efficiency) the business;
  - The organization verifies the efficiency of measures to improve the procedure of planning (energy efficiency) the business phase;
  - The organization adopts its (energy efficiency) plans in advance of the period they relate to.

#### 3.2 Planning the organization

The phase of (energy efficiency) planning the organization is, alongside the phases of actuating the organization and controlling the organization, one of the key parts differentiating the proposed model from the existing models. In this part the planned sustainable (energy efficiency) business excellence of the organization as a whole is adapted to the individual level (employee or other kind of stakeholder). This part is essential for effective and efficient implementation.

The environmental management (energy efficiency) model includes the following approaches for (energy efficiency) planning the organization:

- a. Analysis of current situation:
  - Existing duties, responsibilities, authorities and communication of employees as well as

- structures, connected with the mentioned elements;
  - Roles of individual groups of stakeholders, except employees;
  - Existing organizational processes (planning, execution and control).
- b. Duties. The organization as a social unit defines:
- Duties for specific jobs, according to defined goals, strategies and tactics;
  - Roles of specific groups of stakeholders, except employees.
- c. Responsibilities. The organization defines:
- Responsibilities for execution of duties with an emphasis on individual's personal responsibility.
- d. Authority. The organization as a social unit defines:
- Employee authorization for execution of duties;
  - Methods of delegating the duties, responsibilities and authorizations as well as empowerment of employees.
- e. Communication. The organization as a social unit defines:
- Holders, paths and deadlines for communication by leaders with employees and among them;
  - Systems for informing all stakeholders.
- f. Organizational structures and processes. The organization as a social unit defines:
- The organizational structure that every stakeholder is familiar with;
  - The actual job systemization;
  - Planning, actuating and controlling the organizational (energy efficiency) processes (methodology, holders, documentation, audits, learning, improvements etc.);
  - System of (energy efficiency) indicators for efficiency of organizational processes.
- g. Procedure for (energy efficiency) planning the organization. The organization as a social unit:
- Defines the procedure for planning the organization, taking into account time (when to plan), people (who plans), procedure (the sequence of planning phases), documents (regulation of organization) and communication (with all stakeholders);
  - Regularly checks the suitability of the planning procedure;
  - Introduces measures required in case of deviation from the anticipated organization planning procedure;

- Verifies the efficiency of measures to improve the organization planning procedure;
- Adopts the plan before the beginning of the period for which it refers to.

### 3.3 Actuating the organization

The key task of the managers within this phase is to recruit, introduce, allocate, develop, motivate and lead the employees as well as to communicate with them. In like manner they should also interact with other stakeholders. The actuating the (energy efficiency) organization phase is crucial, yet is often not thoroughly enough understood and the phases of management process are not executed sufficiently systematically and consistently. The environmental management (energy efficiency) model includes the following approaches for actuating the organization:

- a. Human resources management. The organization as a social unit defines the processes of:
- Recruiting and selection of new employees with adequate competences (knowledge, abilities, personal and social characteristics);
  - Introducing new employees via mentorship (also in case of allocation and/or advancement);
  - Education and training in order to introduce, motivate and retain good workers – specialists as well as managers;
  - Knowledge management (planning, organizing and controlling the activities, connected with knowledge) – for employees and other stakeholders;
  - Moving the employees to other jobs or into other organizational units inside the organization as well as external fluctuation – leaving the company or pensioning off;
  - Decentralization of HRM functions – from the personnel department to leaders.
- b. Leading in narrower sense. The organization as a social unit defines the processes of:
- Influencing on employees and other stakeholders by leaders, taking into account the principles of direction towards the people, leading by example and accessibility of leaders;
  - Including the employees and other stakeholders (in planning, projects, participation at conferences etc.);
  - Stimulating the employees and other stakeholders to inclusion, learning and giving the proposals for improvements as well as to planning, execution and control of improvements;

- Stimulating and supporting the teamwork and the exchange of best environmental practices within the organization and with the stakeholders;
- Execution of personal evaluation / personal development interviews with employees and of processes to take measures on the basis of identified improvement opportunities.
- c. Communication. The organization as a social unit defines:
  - The processes of communicating the environmental mission, vision and values of the social unit to all stakeholders;
  - The processes of communicating the environmental goals, strategies/tactics to employees;
  - The system of communicating/reporting in support of the execution;
  - The system of conflict management;
  - The culture of open formal and informal communication in all directions of the organizational structure.
- d. Motivation. The organization as a social unit defines the system of:
  - Motivating and rewarding for all groups of stakeholders so that the reward is tied to responsibility;
  - Sanctions for not attaining the goals, not respecting the rules and agreements (known in advance and consistently executed);
  - Material rewards for proposals for environmental improvements and innovations of employees;
  - Non-material rewards for proposals for environmental improvements and innovations of employees (selecting the best employee, the best team etc.);
  - Performance appraisal of employees and appraisal of leaders with the aim to improve their competences;
  - Safe and pleasant working conditions, considering equal opportunities and support of employees when balancing professional and private life;
  - Leaders' support for execution of tasks and attaining the goals with the aim of assuring a pleasant atmosphere, trust and commitment of employees;
  - Employee satisfaction surveys and other methods of gathering feedback from employees and measures on the basis of identified weaknesses as well as the control of executed measures.

### 3.4 Controlling the organization

The socially responsible and environmental management model includes the following approaches for controlling the organization:

- a. The organization checks the real duties, responsibilities, authorities, communication, structures and processes and compares them to those planned.
- b. The organization looks for deviations between planned and actual duties, responsibilities, authorities, communication, structures and processes and tries to identify the causes.
- c. In order to eliminate the deviations of the actual compared to planned, the organization takes measures – and introduces changes on the basis of facts (improvements, innovations).

### 3.5 Controlling/checking the sustainable (energy efficiency) business excellence

The controlling/checking of (energy efficiency) business phase is the last phase of the management process. The sustainable (energy efficiency) business excellence and environmental management model includes the following approaches for controlling/checking the business:

- a. The organization tracks what was planned in the (energy efficiency) planning the business phase (environmental mission, vision, goals, strategies, tactics).
- b. The organization designs the (energy efficiency) system (i.e. standardized method) of:
  - Comparison of actual (energy efficiency) results with the planned ones, comparison with trends and results of competitors and with other best environmental excellence practices;
  - Determining the deviations between actual (energy efficiency) and planned situation and causes.
- c. The organization designs the (energy efficiency) processes to introduce the measures to implement change (improvements, innovations).

### 3.6 Execution of tasks - operations

The phases of planning the sustainable (energy efficiency) business excellence as well as planning and actuating the organization are followed by the execution of tasks on the basis of business functions or other forms of organizational unit. The tasks have to be executed in accordance with adequate structures/processes, through which the organization

performs and achieves results. Besides the basic business functions (purchase, finance, 'manufacturing', HRM, sales etc.) that are directly connected to the organization's core business, there are also some other supportive functions that have to be executed, such as R&D, accounting, safety, logistics, legal affairs, investments, etc.

The environmental (energy efficiency) management model searching sustainable business excellence includes the following approaches for execution, which is not a sequential phase of management but is tightly connected with all five phases of the environmental management process:

- a. The organization defines the systems of:
  - Managing (energy efficiency) relations with existing stakeholders and developing new partnerships, joint introduction of improvements, recognizing and rewarding the contribution to the common success;
  - Customer relations management (planned communications (web pages, e-mail, annual reports, brochures, press conferences, customer counselors)), customer support, care for service quality as the duty of each employee, accessibility of services, responsiveness to demand and complaints, stimulation of creativity and innovation in customer relations);
  - Efficient (energy efficiency) change management.
- b. The organization develops its image to gain higher recognition and a better sustainable (energy efficiency) excellence image in public.
- c. The organization disseminates best sustainable (energy efficiency) excellence practices from specific area of organization to other parts or to other organizations.
- d. The organization actively contributes to the development of sustainable (energy efficiency) excellence society, taking into account the rights and interests of future generation.

#### 4. Conclusion

To begin with nature and environment are virtues, which must be protected. The right to live in the healthy environment and duty to preserve and protect the environment, to achieve the goals of sustainable development are the conceptual framework for protection of human rights. Companies should recognize environmental management firstly as human virtue and then as part of business competitiveness. It has been recognized that with existing business process characteristics, more often than not linked with concept of efficiency, new features are necessary, among them knowledge, environmental awareness, encouraging human relationships, excellence,

supportive contact with natural and other environment, work humanization, ethnic functioning and credibility. The purpose of proposed environmental management energy efficiency model is to promote better management of environment – energy efficiency change, especially business administration of environment in real business sectors or as a tool for valuation of environmental factors in given companies. The model is designed for use in various corporations (companies) and moreover allow further development dependent on single company. Based on theoretical findings and practical experience of the author of the research presents model of environmental energy efficiency management in companies.

The challenge of addressing climate change in the context of moving society towards the environmental, economic and social goals of sustainability requires radical innovation of cleaner technologies and processes which meet individual and social needs at acceptable costs with significantly reduced environmental impacts.

New environment issues dictate the redefining of the interest of customers, users, developers and others in the environmental aspects and impacts of products is increasing [11]. Long-term environmental orientation of the organization depends on:

- the organization (environmental) culture,
- management (environmental) philosophy,
- long-term and enduring choice of resources (capital, work, knowledge).

It is paramount importance for the company to make its sustainability decisions after it has thoroughly studied and analyzed possible course and outcomes, risks and benefits brought about by such a decision. Environment focused management should not focus on short-term benefits, but on long-term consequences of sustainability aimed at long-term efficiency and effectiveness of the company's business and environmental activities [12]. Sustainable business can be a fatal strategic decision for the companies. The more are company we are involved in the environment, the more it is connected with it's participants, with whom it shares it's faith.

Knowledge about environmental factors which influence management of environment can significantly improve how business acts and as a result leads to bigger efficiency and present success of preserving the environment and sustainability of world economy. The purpose of contribution is to enable people interested in its basic research concept when setting the system of environment (energy efficiency) management and implement further development of knowledge transfer in good energy efficiency practice.

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