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**“FINDING OPPORTUNITIES & BUILDING BRIDGES IN THE
AUTOMOTIVE INDUSTRY BETWEEN TURKEY AND THE EU”
TEBD/019 PROJECT**



ENVIRONMENT



POLISH CHAMBER OF COMMERCE



ENVIRONMENT

Although it is possible to present a separate definition for each discipline, environment -in its most general explanation- can be defined as “living creatures being in mutual communication with each other during their lifetime and non-living beings throughout their life span in physical, chemical, biological and social places.”

Humanity has always been in an interaction as well as an uninterrupted and continuous relation with nature and environment. In this uninterrupted exchange, the greatest and most complex relationship of human beings with their environment has been through nature. Humanity has been involved in production activities since its existence. In the beginning and for a long time, the production of humanity has been in balance with nature and the environment, and people have been given the opportunity to return what they get from the nature.

However, especially since the Industrial Revolution, with the use of mass production methods in industry, humanity has gained an upper hand over nature and the environment. Production has become faster than ever with various methods such as electricity, internal combustion and steam engines, the introduction of the assembly lines, and a tendency for the utilization of more energy efficient sources. This rapid increase in production amount brought all kinds of environmental pollution and environmental problems.

Environmental pollution is the disruption of the natural

environment in which people live in unnatural ways. The

degradation of this natural environment, in other words the ecosystem, by human hand can be defined as pollution. The rapidly increasing human population and the increasing demands of this population are the biggest causes of this unnatural ecosystem degradation, that is, environmental pollution.

Many experts classify the types of environmental pollution caused by man as follows: soil, air and water pollution, packaging waste, sound pollution, light pollution, radioactive pollution, etc. In order to combat all these environmental pollutions and to prevent possible disasters, our country, along with the whole world, is taking precautions regarding this issue.

Although, currently there are developed eco-management tools, they are often too complex for small and micro businesses. Tools are increasingly developed to assist SMEs in environmental management. However, most of these tools are considered too complex for small and micro companies. Firms think that these tools will only increase bureaucratic procedures.

Environmental management is a problematic area for SMEs and micro enterprises. They do not have the necessary tools and resources for environmental management. However, the biggest problem is related to the change in consciousness and behavior. Anytime soon, even the smallest companies will have to show their customers, ombudsmen, non-governmental organizations, insurance companies, neighbors and

professional organizations that they are implementing environmental management in their businesses.

Particularly SMEs -due to their small structure- take actions based on the demands they receive via verbal culture regarding environment. Various variables of these businesses such as relatively low level of education and visual working culture instead of documentation must be kept in mind while considering such businesses.

Eco-mapping is a visual and easy-to-use tool that engages employees in environmental management. Basically, eco-mapping is a roadmap that provides a solid foundation for an environmental management system. Eco mapping is basically: a unique and simple tool that helps small firms in their environmental management practices. Eco-mapping is:

- a systematic method for conducting an environmental assessment on site,
- an information gathering method that determines the situation using pictures,
- a study and awareness tool,
- A "do-it-yourself" tool for SMEs,
- It is a tool that enables employees to participate.

In addition to eco-mapping activities, the European Union also expresses its opinion on environmental policies. Although it determines many different and beneficial policies, the EU has 3 basic policies on environment.

The first of these policies is called the Rebound effects. It can lead to over consumption of resources due to increased

income

As a result of environmental policies (especially efficiency policy). When determining the real benefits of an environmental policy, rebound effects must also be taken into account. It is necessary to make realistic planning based on concepts such as zero waste or cleaner production in the industry.

The second policy is about the role of technology. Technology plays an important role in improving resource efficiency. However, many obstacles are faced in the development and implementation of new technologies. Government support is required to reap real economic benefits and firms must be encouraged to innovate in this respect.

The third policy is about the financing of investments. A key obstacle facing new technologies is inadequate funding received from the private sector. Government intervention / support is required to encourage private sector investment in resource- efficient new technology developments. R&D support must be increased for companies that prove to continue or increase their current production by reducing their energy and resource usage.

ENVIRONMENTAL MANAGEMENT FOR INCREASING BUSINESS EFFICIENCY

The "Environmental Management for Increasing Business Efficiency" regulation is one of the most important measures among its similar. This program is a set of studies applied to reduce the environmental impact that may arise during the production of industrial enterprises, reduce production

costs and increase the efficiency of the enterprise. The main purposes of these studies can be listed as follows:

- Reducing water and energy consumption to acceptable levels by using good materials,
- Minimizing the amount of solid waste, waste water, emission and / or adverse effects generated during production,
- Ensuring the highest rate of reuse and / or recovery of raw materials and packaging materials,
- Improving the working conditions and occupational safety conditions of the enterprise.

In order for these studies to be internalized, a lot of things are necessary, instead of a mere follow up. For example, the establishment of a corporate culture is one of the most necessary things for the environmental management understanding. It can easily be seen that waste is reduced by creating a change in personnel's behavior as well as a new production and waste culture. The awareness of an employee at any level of this environmental problem in a company is one of the primary ways to seek solutions. One of the most important features of these methods is that they are suitable for SMEs and do not require very expensive technological investments. According to the data of the United Nations Environment Program, UNEP, it has been observed that the amount of waste has decreased by 50% in companies that implement this environmental management program and make small business changes.

Within the scope of environmental management aimed at increasing business efficiency, it is recommended that companies create a checklist that includes 5 areas in order to successfully implement this method.

The first of these checklists must focus on reducing raw material and material loss. The most important elements for completing this checklist within the scope of environmental management for efficiency are: Prevention of unnecessary waste through awareness, Prevention of loss of energy, resources and time, especially by making necessary maintenance on machinery and equipment and preparation of emergency plans and procedures.

The second checklist recommended to be prepared within the scope of Environmental Management is on "conscious waste management". The items to be checked within the scope of this list are as follows: separation of wastes according to their types (solid waste, liquid waste, chemical waste, dry waste etc.) The second item in the checklist is the reuse or recycling of the separated waste as raw material. The last item added to this checklist is the disposal of waste using environmentally and economically efficient methods.

The 3rd Checklist recommended to be prepared within the scope of the method is about the correct storage and transportation of materials and products. Relevant items in this list are listed as follows: reliable storage, transportation and preparation of materials and equipment, effective inventory control, accurate and environmentally safe

production planning and optimization, and keeping all records as the last item.

The 4th checklist that should be prepared within the scope of environmental management methods for increasing operational efficiency is about water saving. The items of this list are: prevention of leakage and overflow, reuse of waste water as much as possible after necessary precautions, and monitoring of water use in the enterprise.

The 5th list that should be prepared and followed in Environmental Management methods is especially the saving of energy, which is one of the main inputs of production. Control items in this list, which is one of the most important lists, can be listed as follows: Providing appropriate and necessary isolation, monitoring energy use, and ensuring energy recovery and reuse.

In order to facilitate the work of SMEs and to determine more effective working methods in waste management, which is one of the most important issues in Environmental Management, the 5R Rule has been created.

1- Reduce: Reduce waste generation at source. By reducing the volume and amount of waste produced at its source, it reduces the area needed for the storage and disposal of waste and reduces the treatment cost.

2- Reuse: Reuse waste if possible. Find new uses for different types of waste materials in your own production procedures or in other industries.

3-Recover: Recover valuable materials that you can reproduce in your own production procedures or sell to other companies.

4-Replace: Replace the materials and processes you use with environmentally friendly ones.

5-Recycle: Recycle waste materials that can be recycled. This process will reduce the amount of waste to be treated and disposed of.