

## Energy waste

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**Abstract.** Energy restore depends on the residue thermal value. The energy restore unit should receive the material energy continuously to sustain. The material suitability problem consists of two components of quality and quantity both of which can be measured and adopted in a proper place for the energy restore unit. But, still in many countries the residues conversion has a lower priority than separation in origin, restore and compost production. So, the measured thermal energy in the planning stage of a restore unit is altered by changing in the residue quality or quantity through other residue conversion activities.(1)The energy restore unit should be flexible enough in facing changes in quality or quantity of material so that prevent system failure. The best time to analyze the residue suitability is the construction time for the energy restore and selling unit construction.

**Keywords:** compost, energy restore, residue, thermal value.

### 1. INTRODUCTION

THE residue comprehensive management hierarchy has changed the first role of the residue conversion and restore from the first order to third or fourth order. The residue gathering role has also extended to include the recyclable material, that were previously mixed with other residues, gathering infrastructure and methods. Current gathering, change and converting activities should support residue reduction in origin and material recycling activities. The system manager is responsible for decision making and performing activities relating to the residue management hierarchy namely plans, budgets, finance and human resource. Since in origin reduction and material recycling are new activities, performing them the current expenses will increase. The residue manager should analyze the residue management options with respect to efficacy and cost reduction.

In today's residue comprehensive management system, activities and infrastructure expenses with respect to residue gathering, changing, converting and exclusion is getting maximal. So, these activities and enhancements are points for precise review and survey to reduce expenses. Changing the investment priorities to cope with new residue hierarchy means that the traditional views toward residue systems should be updated.(2)

### Energy regeneration

Energy is recreated from civil residues in two methods: 1- directly with burning as a fuel to produce steam and 2- indirectly through the residue conversion into fuel or fuel packages that is conserved depending on the future use. Selecting one of these two forms is affected by general interaction of an energy powerhouse with residue fuel and revenues from fuel selling. If the barrier expenses are high or the site of barrier doesn't have excess space, the manager will choose the energy restoring option.(3)

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### Management in energy regeneration

Management problems and considerations in energy restoring relates to the use of flammable material in civil residues in front of multi usage with recycling and reusing material. Energy in commercial scale is produced when the residue ingredients are changes so that it is not usable in any other field. In this regard the important management problems are: 1- suitability of the residue as a fuel 2-selection of the energy production and restore technology, 3- consultations on the energy selling contract, 4- preparing and proposition of an approach for risk and guarantee, 5- finding a site for burrier of the energy production residues and 6- implementing infrastructures for energy restoring that is cheep enough that can be paid by the society.(3)

### Technology In Energy Regeneration

Problems that should be considered in technology selection consist of confidence, expenses and matching the ecosystem rules. Confidence is measured by the technology performance in a special period of the year that is usually the time for paying the investments on the restoring unit construction. Matching the fuel or energy properties is another measure for confidence. Expense is another measure for efficacy and performance of the technology. Expense consists of initial expenses, investment expenses for the unit and long time performance expenses, maintenance and repairs. We will analyze the technology performance or rule accordance to achieve the output standards considered by the legislation organizations.

The energy recycle problem is solved when a complete set of conditions are achievable for the recycle unit like the residue source, construction investment utilization and acquisition. The residue manager collects the options relating to technology in a beneficial and operational framework and cooperates with the decision maker in technology selection.

### Legislation In Energy Sales

Most of the times, the energy produces from residues is transferred to power plants or the neighboring industries. The warehouses or industries make a choice between the residue produced energy and other competing sources like petroleum, natural gas and char after an economical study on the financial effects of a temporary source. The management problem here is to find an energy selling coincidence with economical conditions leading to facilities that the society can support through revenues from energy selling combined with cashed funds.

Negotiations with energy trade companies will solve this problem. To set an adaptive position, the residue system manager and the plant manager should answer the following economical questions: which factors can change the energy expenses? How will these changes affect the energy recovery project sustainability? How can we divide the advantages from the energy recovery between the power energy consumers and the residue expenditure payers? How can we divide the damages and financial disadvantages of the project?

## 2. BURRIER SITE FOR ENERGY REGENERATION

The energy production in the energy recovery system leads to some residue production that should be buried somewhere. In this case the management problem is to find the position and capacity of the burrier site. Since the goal of the the energy recovery is to reduce the volume of the buried residues, it is possible that the society members disagree with setting a new site for the residue burrier.(4)

On the other hand, these residues may consist of some pollutions produced from the physical or chemical interaction in the fire encasement that makes them unacceptable for burrier in current burrier sites. Today, the current rules and legislations try to categorize the residues to be buried in geocentric exclusion units.(4)

The solution to these problems is to examine the content of the residues to detect and determine their physical and chemical properties. If there were some unacceptable pollutions, the society

should find and select a special geocentric exclusion unit. A civic residue burrier site for acceptable pollution profile should also be used.

### 3. RESULTS

Today, in the field of residue management, engineers and programmers face advances that makes the comprehensive programming for future a difficult task. Lots of technological advances relate to the residue conversion and enough for installed infrastructures in a complete scale. So, decision makers usually face two selections: whether to use the current fully analyzed technology that may or may not be the optimum option for current or future conditions, or to use a new and raw technology that may or may not confirm the corresponding conditions.

In general, all the programs are based on the future conditions anticipation. The residue comprehensive management technology and conceptual development based on new ideas is based on the public awareness relating to resources, economy and ecosystem quality. Samples of conceptual development consist of reusing the food containers, limiting the food packaging, control and standardization of the material used in packaging and deployment and development of the products with a low need for energy.

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