Environmental Analysis of Energy Wood With Use Nanotechnology

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**Abstract:** Traditional energy sources, fossil fuels and electricity produced from nuclear fission energy and big blue practice dominate the global energy supply picture. Other energy sources still have not developed enough. Agricultural and forestry waste, including products of photosynthesis is achieved, which are primarily chemical storage of solar energy is renewable at the viewer stock of carbon in the environment is. Each of these types has its own technology and are focusing more energy species of small value and their high water content, collecting and shipping them is expensive and for other purposes such as fertilizers are applied. This energy is distributed throughout the world and in every country on Earth is available manner, although its capacity per hectare varies considerably, and agricultural waste and forestry is a source of heat energy. Often by people outside the energy markets will be collected. (Traditional biomass) and for example, over 90% of the total energy consumed in Nepal and Malaysia this way comes. Agricultural and forestry waste can also be different from the carbon fuels such as petroleum-derived products can be converted (modern biomass). In 1990 12.% of share in 1990 (more traditional) in 12% of total global energy consumption is mainly in countries like India, China and Brazil has been done. Biomass potentials considerably more than the global energy consumption.

**Key words:** energy, forest, wood, fuel, environment

**Environmental Needs of Wood Energy:**

Wood used in positive and negative themes widely, especially in the field of biomass fuels there. Increasingly, concerns about the negative health impacts of traditional fuels in the household there. In addition to difficulties associated with gathering and cooking, air pollution inside houses is also noteworthy that the points through the use of biomass fuel is greater... Controversial topics related to negative environmental effects of deforestation wood theme also encompasses. Accordingly, the use of wood fuel trade by individuals to households and industrial business sector as a variable is considered significant. Hence the continuity of fuel wood harvested from forest areas may be unstable component of several important reasons for deforestation in the area to be considered at the local level. However, this only due to deforestation elsewhere numbers can do. Many studies increasingly supported this view have, sealed respective categories make clear that conversion of natural forest lands conscious farms and other related costs as reasons for deforestation in most countries and are among the areas covered by these studies accommodation (Mata-Alvarez, J., et al., 1993). Increase in theme-related concerns about global warming, global climate changes due to increased emissions of greenhouse gas and other co2 in the atmosphere by fossil fuels, pressures associated with the development of energy sector now more on developing renewable energy sources are concentrated. Therefore, extensive use of wood energy already learned widespread support because live trees and vegetation actually had performance similar to the skin and are considered as reservoirs of carbon. If the issue of sustainable production and worked to ensure, as a source of wood can be considered free of carbon. Environmental development strategy for success in the energy sector in some European countries have developed (especially in the countries of northern Europe and the Europe Union Member States). Important source of wood energy in Europe is known. More than 45% volume of wood harvested annually, usually is spent on energy. Wood energy consumers are: A - residential in rural areas about 65% B - 27% A forest industry - consumers of middle-level facilities such as local heating and building societies about 8%. However, hydrocarbons have been published issue of boilers and wood burning, responsible for creating the phenomenon called "blue mist" are, as a possible limiting factor for widespread use of wood energy in the future, regardless of technological advances in measurement in pollution control and emissions resulting from its subjects, is considered (Klass, 1998).

**Co2 Emissions Wood:**

By estimating greenhouse gas releases, can be used to assess global environmental wood for payment. And co2 is the most important greenhouse gas. Although burning wood in space finds publishing co2, growth related to this fuel wood or the carbon dioxide (co2) encompasses the space. As a first estimate can be stated that the use of wood is carbon-free, meaning that no specific release of carbon into the environment there. The estimate by the evidence resulting from the two dominant mechanisms are supported. A - they often revolves around sustainable consumption of wood occur. This refers to actual use all the wood fuels produced from non-forest land (eg agricultural land, grove and farm house and gardens) and the use of wood fuels most of the land is
Sustainable refers to the ability of being carbon neutral is because the same amount of CO₂, which was reported due to wood burning and will spread in space due to growing this wood is recycled. B - If debris resulting from timber cutting and related processes to convert the land remained as fuel wood, they are not easily degraded by natural processes, leading to values of carbon emissions in outer space (Chynoweth, David P., 1987). Obviously if the firewood used to help avoid some of the energy resources required will be minor are used. For most things, and in many countries, fossil fuels would be hypothetical proposals, such as coal, gas or oil. For applications in countries less and less water and wind powers a proposal can be considered hypothetical, while the next 15 years or more other renewable energy options such as energy from solar energy as the quantity is non-important. Effects of fossil fuels on global climate is likely to become very good evidence has been. Sample data related to the CO₂ emissions per unit of fuel energy environmental LEAP database is available. In addition, other renewable energy sources that are considered, as are carbon-free wood. The implications associated with the consumption of fuel wood in Asia from the standpoint of global environment can be estimated by the lack of carbon dioxide emissions avoided through the use of wood fuel energy sources was evaluated. It is probable that often a combination of alternative energy sources in each country vary. LPG for the current study could be used as an alternative proposal to be considered. This will lead to a simple estimate, because per unit of energy, coal and about 33% more kerosene 7% more in comparison with carbon dioxide produces LPG. Changes related to wood and biomass fuels and the agricultural residues is ignored, because the carbon production of biomass for the other cases as common as wood is used[4]. In 1994, total wood used for member states to prevent the release of lead RWEDP about 277.683 pounds tons of carbon dioxide (CO₂) in comparison with LPG consumption is replaced. The average rate of 6% against the common CO₂ emissions Due to the overall fuel consumption is similar countries. By 2010 these figures to 349.615 K Ton, 3% moderate consumption seems.

Economic advantages of wood commonly used in Asia for the global environment can be estimated from the amounts that should, if this fuel was not used to avoid carbon dioxide emissions can be achieved in space costs. The estimated cost is much more recent and related conditions and technological options such as (fix, and block storage of carbon dioxide) (Salaff, Stephen-Anaerobic Digestion in Toronto, 2004).

According to estimates (IPCC, 1997) IPCC 50 dollars per ton carbon dioxide for cases like the above mentioned items within the powers of a sample statistics are available. So is estimated that in 1994 approximately 14 billion dollars in 2010 and approximately $ 17 billion of costs related to CO₂ Using wood fuel in the member countries will save RWEDP.

Benefits Of Wood Energy Development:

Benefits of wood energy development plan for the global environment as RWEDP offers. In this regard RWEDP with others in various activities related to wood energy conservation and survival is participation. When the conditions of conservation of energy is achieved, any increase in energy demand for wood fuels the region to bring on additional fossil fuels that release carbon dioxide resulting from it will be over, will be resolved. However, definitive data about the maintenance and protection of wood energy is still available and on the basis of some hypotheses should be considered. Cases estimated gain or loss associated with some applications such as RWEDP, as costs against the benefits for the global environment can be estimated as follows: From the viewpoint of cost the Dutch government through the Food and Agriculture Organization RWEDP 15.2 million dollars allocated in the 1999-1984 period. Terms of earnings figures and similar figures ($ 50 per ton) to avoid or prevent carbon dioxide can be used in space (Bardiya, Nirmala, 1999). Accordingly, earnings or losses for RWEDP environment can be based on carbon dioxide (CO₂) inhibition can be calculated. These calculations will lead to the following conclusions:

A - earnings or losses in 10 years is achieved. Participation 0.01% annual percentage temperate RWEDP wood for energy conservation in the region would be sufficient. In fact, such effects seem limited will be very moderate and low. B - if inevitably share RWEDP wood energy conservation in the region a / 0% Default is (still seems low investment return period of 11 months will only RWEDP. This point should be mentioned that RWEDP with several objectives other than participation in reducing greenhouse gas emissions is. In fact the six priority regional activities RWEDP supports only one of them is the environment, being either regional or global basis. To compare the Dutch government should be mentioned that the amount equivalent to U.S. $ 375 million in the 1997 national budget, for to achieve emissions reduction of 15,290 tonnes of CO₂ km to the global environment, within five years, has allocated. This means tons of 3058 pounds per year. (Ministry of Agriculture, Natural Conservation and Fisheries 1997). This refers to a specific budget of $ 123 per ton of carbon dioxide is. Programs can jointly by three Ministry of Economy, environment and agricultural run. Quite possible that a similar result, as prevention of global publishing CO₂ through the participation of the Ministry of Development and Food and Agriculture Organization has been allocated through the program to protect wood energy in Asia with a limited budget, be realized.
Global Environmental Policy Wood Energy:

Many general policies related to wood energy and the environment are still based on exceptional cases and are based, namely the relatively small areas that use wood in their steady state has not. Also in this case has led to policy changes to increase the absorption of doing good transport fuel consumption of wood fuel to the fossil fuels or widespread forms of renewable energy has been. Although the available evidence we can conclude that the use of most wood-axis stability takes place. So if people use wood for their daily expenditures continue studying will be more advantageous. Based on the amount of emissions prevented CO₂, the truth of a large amount of energy from wood by the majority of more importance than the adoption of efficient heater by a limited number of users will enjoy. Such observations may lead to change in this priority area is wood energy conservation programs. Instead of having the highest efficiency heater goal that they will be accompanied by price increases, priority should be based on comfort, health and general attractiveness based on reasonable prices to be built using much energy they can use wood. In fact patterns for areas firewood is not sustainable. Special programs that are compatible with those areas should be designed (IWM, 1998).

Regardless of preventing carbon emissions from this forest restoration, forest renewal and forest work, the aim of the current environmental policies and it is clear that most of the time of forest-related activities will be economically feasible or that fundamentally new sources of growth Results for the sustainable use of wood and non wood products is provided. Sustainable use of wood as a first attempt is described in this topic. Above political considerations, not only is related to international agencies but also for forest policy makers in Asia and East Asia in order to draw the landscape in 2010 is relevant and desirable.

Table 1: Summary of the 16 member countries RWEDP

<table>
<thead>
<tr>
<th>2010</th>
<th>1994</th>
<th>(Katon) environmental impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>200/602/10</td>
<td>000/317/4</td>
<td>Co₂ emissions from fossil fuels</td>
</tr>
<tr>
<td>349000</td>
<td>278000</td>
<td>Prevent the spread of CO₂ Through the use of firewood as compared to LPG</td>
</tr>
<tr>
<td>420000</td>
<td>334000</td>
<td>Prevent the spread of CO₂ Through the use of firewood as compared to kerosene</td>
</tr>
<tr>
<td>703000</td>
<td>560000</td>
<td>Prevent the spread of CO₂ Through the use of wood fuel compared with coal</td>
</tr>
<tr>
<td>17500</td>
<td>14000</td>
<td>Costs prevent CO₂ Pain compared with LPG (million U.S. $)</td>
</tr>
</tbody>
</table>

Little overall effect of such a program as stored energy RWEDP wood is not easy. How many heaters can be improved with the domestic energy system be consistent? Which part of it could be RWEDP credit? How much wood heater by each store will be improved? (China has 150 million and India has developed 25 million heaters). And what about the way commercial and industrial users are there? A similar problem to quantify the effect of improved wood energy as the prevention of seasonal fuel consumption there. What some people decide to heater options LPG, coal and oil lamps, because the traditional wood burning stoves are convenient, they rejected? Or because the supply conditions and still provide fuel wood production is Which part of it again could be RWEDP credit? Even if is difficult or impossible, to try and evaluate the effect on axis RWEDP wood fuel sources must exist. If most data are known. They can be easily converted to CO₂ can be stored. RWEDP activities to strengthen national and local efforts in the ongoing development of wood energy conservation through sustainable management and use of wood energy resources will help. To study the existing pattern of regulation may be appropriate to share RWEDP protect wood and energy resource development in the region will act. Can speak the relevant criteria as% 1 / 0 current average energy use of wood, be expressed. On to become household sector, due to the effects RWEDP families in 1000 than in Asia and the use of fossil fuels, the use of wood burning heaters with higher efficiency is considered (De Baere, L. 2000). According to these cases can use wood fuel and its effect on the global environment through greenhouse gas estimation was evaluated was published. Single most important greenhouse gas, carbon dioxide CO₂ here will be considered and other gases such as methane and other carbon-hydrogen will not be discussed. Any gas emissions resulting from wood that can be comparable to gas is spread by other fuels.

Conclusion:

Accordingly, more programs and projects could be targeted in the development of wood energy and ready to view the main benefits of the global environment not only for the present member countries RWEDP, but for other countries can be explained in the East Asia region. Also can be on wood biomass fuels under the Environmental Protection be invested

A - fallen leaves down, needle shape, twig and branches of trees standing B - instead of wood and branches left after harvesting of commercial forests, C - different waste products, including stems, bran, straw, shell and corn cob D - grass or sprouted e - industrial waste as sawdust, pieces cut, sugarcane pulp, coconut leaves and stems - lesions discarded wood from various sources (such as old furniture, wood revived renovated building sites, wood brought water).
REFERENCES


