Energy Security Planning and Process under Sustainable Development

Dr. Pratiksha Raghuvanshi

Assistant Professor, Department Of Botany,S.V.PG College, Aligarh

Introduction

Dematerialization reduces national energy consumption, but it depends on many levels of industrialization and financial benefits. Dematerialization refers to a relative or relative reduction in the amount of material used to develop an economic production unit. In the tones of materials used per unit of GDP or the relative resolution of books, dematerialization has taken place in many countries for decades. These changes have been added to the structural exchange of energy-intensive sectors, in particular chemical and building materials.

Research draws that cause dematerialization are:

1. As the income rises, the consumer's preference shifts to cheap services with a low material content.
2. As the savings become longer, the need for new infrastructure (buildings, bridges, roads, railways, factories) decreases and the need for steel, cement, non-ferrous metals and other basic materials is reduced.
3. Material use is more efficient, such as thinner car seats, thinner cans and lightweight paper for printed media.
4. Replace with low-cost, lightweight, easy-to-use and sometimes more suitable materials such as plastic substitutes for metals and glass and fiber optics for copper.
5. Re-processing energy-intensive substances (steel, aluminum, glass, paper, plastic, asphalt) reduces energy-intensive production.
6. Reprocessing can be confirmed by environmental regulations and taxes.
7. Reuse, extend the life of the product and increase the use of products, reduce new material requirements per service unit.
8. Countries with high energy imports and energy prices tend to reduce domestic production of bulk materials, with imaginative countries trying to integrate the first and second product stages of bulk materials in the domestic industry.

Nevertheless, this case is clearer in industrialized countries. However, most underdeveloped countries, such as India, also suffer some of the causes of the increased per capita use per head of the population. Improving urbanization, mobility and income requires material-intensive infrastructure, buildings and products. The importance of smaller households, suburban communities and shopping centers is increasing, and second homes generate extra mobility (Kundu 2001). Trends in repairs, product replacements and removal of products and packaging will increase

material efficiency and oppose energy efficiency and sustainable development. Energy consumption in many developing countries is rejected by industrialization.

Urbanization, increased travel by road, increased revenue. In many areas, widespread differences in income also reflect patterns of energy consumption. Small allocations of populations that consume most of the commercial energy are often required.

The rising disposable income translates the energy consumption of households in developing countries, such as India, from traditional fuels to commercial fuels. This trend has a significant impact on the energy efficiency of the house. Since then, the technical efficiency of cooking appliances using commercial fuels is higher than the technical efficiency of biomass, and the tendency is to reduce the complex energy consumption per household. Typical examples are moving a wood stove with 12-18% technical efficiency to a 48% efficiency oil stove or a 60% efficiency gas coal with liquefied petroleum gas. Then the commercial energy replacement rate of marketed energy increases the ratio of commercial energy to GDP. Traditional energy is generally not included in the calculation of such a ratio. Increasing income and quality in rural and urban areas also increases energy consumption. The country must also endure the use of energy-consuming energy that entails an increase in energy consumption.

At the broadest level, India's energy security is mainly concerned with ensuring the continuous availability of commercial energy to confirm economic growth. India is faced with a questionable question of gathering energy demand and delivering the right and varied energy of hope quality to the users in a sustainable way.

The report improves energy planning by expanding, expanding or refining sustainable energy security indices that describe India's performance from different perspectives, including:

1. Economic,
2. Environment,
3. Society and
4. Settings.

India is increasingly dependent on natural gas and petroleum fuels and is vulnerable to supply interruptions and price spikes. The different characteristics of sustainable development mainly relate to energy, infrastructure investments and cleanliness, and lower expenditures on expenditure to achieve objectives. Effectively activate the energy system. This requires efficient use of existing resources, managing a wide range of resources and using them to achieve these goals. Up to now, a low concentration of some environmental characteristics on the (relative) exclusion of other environments has been paid to the link between the social dimension and the economic dimension of energy security. The essence of sustainable development is the accuracy or correctness of the border and the trade-off between the misuse of economic and social development and environmental protection.

That is why the state must draw up an advanced and systematic action plan to secure the supply and reduce energy demand. Diversification will continue to serve as an

essential component of energy security for fossil fuels. It also calls for the development of a new generation of "clean coal" and low-carbon technologies that support the increasing role of a variety of renewable energy sources that are more competitive and accept hydrogen fuel. To solve future challenges, we need to switch to more sustainable technology and fuel types. Investing in renewable or renewable energy or energy without using limited resources such as fossil fuel technology and infrastructure must support economic and environmental policies.

As dependence grows and grows, energy security depends on how countries manage trade, relationships or communications.

Conclusion

Eliminating the energy intensity of GDP growth through improved energy efficiency is important for gathering energy challenges in India and monitoring energy security. In this context, energy-driven demand-driven design is one of the most feasible, feasible and cost-effective options in our country. That is why energy security is one of the biggest challenges for India's foreign policy in the coming years. The national energy security policy must focus on sustainable development and mitigation as a by-product of its main objective.

References

1. Damjan K. and Peter G. (2005) How to compare companies on relevant dimensions of sustainability, 55(1): 551– 563p.
2. Palou-Rivera et al (2011) Updates to Petroleum Refining and Upstream Emissions, Centre for Transportation Research, Argonne National Laboratory.
3. IEA (International Energy Agency) (2010) Worldwide Trends in Energy Use and Efficiency, Key insights from IEA Indicator Analysis, OECD/IEA, Paris, France.
4. IEA (2012) World Energy Outlook 2010, China and India insights, OECD/IEA, Paris, France.
5. Loschel, A., Moslener, U., Rubbelke, D (2010) Indicators of energy security in industrialized countries. 38(4): 1665–1671p.
6. Kruyt B, VanVuuren D P, deVries J M and Groenenberg H (2009) Energy Pol 37(2): 2166- 2181p.
7. Löschel A, Moslener U, DirkT.G.Ru¨ Bbelke (2009) Indicators of energy security in industrialized countries, Energy Pol 38(4): 1665-1671p..
8. Marilyn A. B, Benjamin K. Sovacool (2007), Developing an “Energy Sustainability Index” to Evaluate American Energy Policy, Working Paper #18, School of Public Policy, School of Public Policy, Georgia Institute of Technology.