The Role of Energy in The World

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ABSTRACT

In this article, energy is an important component of development and growth. This leads to the emergence of investments, innovations and new industries, which are important engines of job creation, inclusive economic growth and general well-being for the entire economy. In this blog we covered the importance of energy, the current state of access to it, the importance of renewable energy, energy shocks and problems and the promotion of sustainable energy

Keywords: Energy, resource, technology, fuel, renewable energy, waste, efficiency, global warming, cheap and high-quality energy.

Energy is an essential part of development. This powerful resource unlocks investments, fuels innovation and enables the creation of new industries that can generate jobs and inclusive growth for entire economies. However, it is astounding that nearly 675 million people throughout the world still live without electricity today. Moreover, about 2.3 billion people rely on traditional fuels and technologies that pollute the environment to cook their meals. The prosperous world we know today is only possible because of energy, and it is crucial that we continue to scale up renewable energy and energy efficiency while avoiding new coal plant construction and retiring old ones. This approach is the key to ensuring affordable, reliable, and sustainable energy to power homes, schools, hospitals, and businesses.

Current State of Energy Access

It's surprising to know that nearly 675 million people still live without electricity worldwide, while 2.3 billion people rely on traditional and polluting fuels to cook their meals. This situation means that energy poverty is still dominant, making the poor the worst hit by the absence of adequate energy infrastructure. Furthermore, the dependence on traditional fuel sources such as wood and animal waste has a harmful impact on health and education, causing illnesses and a high dropout rate for school-going children.

The current state of energy access is disheartening and calls for immediate action to shift to cleaner and more efficient alternatives. It's essential to scale up renewables and energy efficiency and invest in electrification at scale to provide clean energy to power homes, schools, hospitals, and businesses. It's also crucial to avoid new coal plant construction and retire old ones, as they worsen climate change and harm human health.

Importance of Renewable Energy and Efficiency

Energy, the powerhouse of every economy, creates investments, generates jobs, fosters inclusive growth, and provides shared prosperity for entire nations. The global population, however, still struggles without access to electricity. And, it is a fact that the use

of traditional fuels and polluting technologies for cooking is continuing to take a toll on the planet. Therefore, we need to scale up renewable energy and efficiency while avoiding new coal plant construction and retiring old ones. Plus, it is critical to provide universal access to affordable, reliable, sustainable, and modern energy to power homes, schools, hospitals, and businesses.

Importance of Renewable Energy and Efficiency:

Renewable energy and efficiency are the keys to a sustainable future. Scaling up renewables and energy efficiency is crucial to combat global warming, reduce energy consumption, and ultimately tackle climate change. It benefits not only the environment but also the economy and society. The transition to renewables and efficient energy increases energy security, creates local job opportunities, and reduces the dependence on energy imports.

On the other hand, the new construction and maintenance of coal plants are expensive, polluting, and increasingly becoming redundant. The existing coal plants are often located far from the areas of high demand, which results in transmission losses and higher costs. Therefore, renewable energy and efficiency must gain momentum at a quicker pace to ensure affordable, sustainable, and modern energy for all.

Universal access to affordable, reliable, sustainable, and modern energy is essential for the growth and prosperity of every economy. Sustainable energy presents an opportunity to transform lives and economies, safeguarding the planet. Providing universal access to affordable, sustainable, and modern energy can significantly impact education, health, and other societal benefits.

Energy Shocks and Challenges

It is an unfortunate fact that energy shocks have hit the poor the hardest. The COVID-19 pandemic and the war on Ukraine have further exacerbated energy shortages and energy security concerns, while simultaneously slowing down the progress towards universal access to affordable, reliable, sustainable, and modern energy by 2030. This goal is outlined in the Sustainable Development Goal (SDG) 7.

These energy shocks have impacted most countries, but developing countries have faced the most significant burdens. Energy-importing countries that carry these burdens have limited capacity to mitigate energy price volatility, and as a result, energy rationing in education and environment has become common.

It is high time we prioritize the development of renewable energy and energy efficiency alternatives on a global level. Something needs to be done to avoid instances like this in the future. The potential benefits of scaling up these options are numerous - providing clean energy to power homes, schools, hospitals, and businesses is just the beginning. Additionally, avoiding new coal plant constructions and retiring outdated ones is critical to ensuring universal access to sustainable and modern energy.

Role in Sustainable Energy

As the single biggest contributor to global warming, the energy sector plays a pivotal role in shaping the future of our planet. However, the challenge lies in reducing our dependence on fossil fuels while making clean and affordable energy available to everyone. At UNEP, we believe that sustainable energy presents an opportunity to transform lives and economies while safeguarding the planet.

That's why we work with governments to help them improve energy efficiency and increase the use of renewables in their countries and cities. One of our key focus areas is providing governments with sound policy advice that can go a long way in shaping the energy policies of nations. Besides this, we also play a catalytic role in public and private finance for clean energy, thereby creating access to financing for clean energy projects across the globe.

As a part of our efforts, we also work on developing our understanding of science and supporting the uptake of clean energy technologies, which can contribute to key UN processes such as the Sustainable Development Goals, the UN climate change convention, and the Sustainable Energy for All initiative. Our

goal is for sustainable energy to lay the foundation for resilient, low-emission economies and societies around the world.

At the Copenhagen Centre on Energy Efficiency, established as the energy-efficiency hub of Sustainable Energy for All, we focus on scaling up energy-efficient practices, promoting renewable energy, and advancing access to clean energy solutions. These efforts culminate in the global alliance for buildings and construction, which contributes to the objective of limiting global warming to well below 2°C.

History and Transition of Energy Mixes

Before the Industrial Revolution, traditional biomass was the primary source of energy used across the world. People burned wood, crop waste, and charcoal to stay warm and cook food. The transition from traditional biomass to coal, oil, and gas was incredibly slow. However, with the Industrial Revolution, coal became the dominant source of energy. This was followed by oil and gas, and by the turn of the 20th century, hydropower was added to the mix. Nuclear energy wasn't added to the mix until the 1960s.

Today, our energy mixes are relatively diverse. We rely on a range of sources such as coal, oil, gas, nuclear, hydropower, solar, wind, and biofuels. But the rise of modern renewables has been a significant development in recent years. With the advances in technology and infrastructure, renewable energy has become more efficient and cost-effective than ever before.

However, despite the shift towards cleaner energy sources, our reliance on fossil fuels still remains strong. It's essential to reduce our dependence on them in producing electricity and heat, and most importantly, to make clean energy accessible and affordable for everyone on the planet.

Conclusion

Energy is the engine that drives jobs, growth, and prosperity for economies. With over 675 million people worldwide without access to electricity and with nearly 3 billion relying on traditional fuels, renewable energy plays a crucial role in achieving universal access to affordable, reliable, and sustainable energy. UNEP is working with governments to improve energy efficiency and increase the use of renewable sources, contributing to important UN processes. Our challenge is to make clean and affordable energy available to everyone while reducing our reliance on fossil fuels and limiting global warming.

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