

How Solar Energy Can Save The World

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Abstract: Solar energy is a promising alternative to traditional sources of energy that can help save the world by reducing greenhouse gas emissions, creating jobs, and improving energy security. As a clean and renewable source of energy, solar energy can mitigate climate change by reducing our dependence on finite fossil fuels. The solar industry is also creating new job opportunities worldwide and is expected to continue growing in the future. In addition, the use of solar energy can improve energy security by providing locally generated energy that is flexible and scalable. By investing in solar energy, we can create a cleaner, more sustainable, and more equitable future.

Index Terms – Solar energy, greenhouse gas emissions, energy security, sustainability.

I. INTRODUCTION

The world is currently facing two interrelated crises: climate change and energy insecurity. The demand for energy is growing rapidly, and most of the world's energy is produced from non-renewable sources, which are finite and contribute to climate change. Solar energy is one of the most promising alternatives to traditional sources of energy. It is abundant, renewable, and clean. In this paper, we will discuss how solar energy can save the world by reducing greenhouse gas emissions, creating jobs, and improving energy security.

II. REDUCING GREENHOUSE GAS EMISSIONS:

Solar energy is a clean and renewable source of energy that does not emit greenhouse gases. By using solar energy, we can reduce our dependence on fossil fuels and lower our carbon footprint. According to a study by the International Energy Agency (IEA), solar energy could be the world's largest source of electricity by 2050, accounting for 16% of total electricity generation (IEA, 2014). This could lead to a significant reduction in greenhouse gas emissions and help mitigate climate change.

III. CREATING JOBS:

The shift towards solar energy is also creating new job opportunities. The solar industry is growing rapidly and is expected to create more than 26 million jobs worldwide by 2050 (IRENA, 2017). The jobs created by the solar industry are diverse and range from installation to maintenance and research and development.

IV. SOLAR ENERGY CAN CREATE MORE JOBS IN SEVERAL WAYS:

Solar panel manufacturing: The production of solar panels requires a skilled workforce to handle the manufacturing process. The solar panel industry is rapidly expanding, and the demand for solar panels is increasing, which will lead to more jobs in this sector.

Solar installation: The installation of solar panels requires a skilled workforce to handle the installation process. This includes the design, engineering, and installation of solar panels. The installation process is labor-intensive and requires skilled workers to ensure that the panels are properly installed and functioning correctly.

Solar maintenance: Once solar panels are installed, they require regular maintenance and repair to ensure they operate at peak efficiency. This includes cleaning, inspections, and repairs. The maintenance and repair of solar panels can create new job opportunities for workers with technical skills.

Solar project development: Developing new solar projects requires a range of skills, including project management, engineering, and financial expertise. As the solar industry grows, there will be increasing demand for workers in these areas.

Energy storage: As solar power becomes more widespread, the need for energy storage will increase. Workers will be needed to design, manufacture, and install energy storage systems, including batteries, to store excess energy generated by solar panels.

Overall, the growth of the solar industry will create new job opportunities in manufacturing, installation, maintenance, project development, and energy storage. The solar industry can also contribute to the growth of other industries, such as construction and engineering, as solar projects require new infrastructure and equipment.

V. IMPROVING ENERGY SECURITY:

The use of solar energy can also improve energy security. Solar energy is abundant and widely distributed, which means it can be generated locally, reducing the dependence on imported energy sources. In addition, solar energy systems are modular and can be easily scaled up or down, providing flexibility to meet changing energy needs.

VI. CONCLUSION

In conclusion, solar energy has the potential to save the world in many ways. It is a renewable and abundant source of energy that can reduce our dependence on fossil fuels and lower greenhouse gas emissions. Solar energy can also create new job opportunities, improve energy security, and increase access to electricity in remote or underserved areas. As technology advances and costs continue to decrease, solar energy is becoming more accessible and widespread. With continued investment and support, solar energy has the potential to play a significant role in mitigating climate change and creating a more sustainable future for generations to come.

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