GREEN PARTICIPATION,
GREEN EUROPE

PROJECT NUMBER : 2023-2-TR01-KA154-YOU-000168735

Introduction of Renewable Energy Sources

PRESENTATION

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The Importance of Renewable Energy

Increasing the use of renewable energy is crucial for companies for several reasons. Firstly, it helps reduce carbon emissions and environmental impact, aligning businesses with global efforts to combat climate change. This is not only a corporate responsibility but also a way to meet regulatory requirements and avoid penalties in a world increasingly focused on sustainability. Secondly, renewable energy can provide long-term cost savings, as it reduces dependency on fossil fuels and minimizes energy price volatility. Finally, companies that invest in renewable energy enhance their brand reputation, attracting environmentally conscious customers and investors while fostering innovation in sustainable technologies.





Climate Change and Reduce Air Pollution



Supports Sustainable Economic Growth



Leading to Improved Working Efficiency

Differences Between Renewable & Non-Renewable



- Capable of meeting energy demands indefinitely without depleting resources
- Producing little to no greenhouse gas emissions or pollutants during operation
- Initial setup costs can be high, but operational costs tend to be lower due to free fuel



- Resources will eventually run out as they take millions of years to form
- Associated with high greenhouse gas emissions, air pollution & climate change
- Job stability may decline as resources become depleted and energy transition occurs

Types of Renewable Energy

HYDROPOWER

Hydropower, or hydroelectric power, generates electricity by using the flow of water, typically from dams or rivers. It is one of the oldest and most reliable renewable energy sources, contributing significantly to the global electricity supply.

GEOTHERMAL ENERGY

Geothermal energy taps into the Earth's internal heat, using steam or hot water from underground reservoirs to generate electricity or provide direct heating. It is a reliable and constant energy source, especially in regions with high geothermal activity.



SOLAR ENERGY

Solar energy harnesses power from the sun using photovoltaic cells or solar thermal systems. It is one of the most abundant and cleanest forms of renewable energy, widely used for residential, commercial, and industrial purposes to generate electricity and heat.

BİOMASS ENERGY

Biomass energy is produced by burning organic materials like wood, agricultural residues, and waste. It provides a renewable source of energy, mainly used for heating, electricity generation, and as biofuel, while also helping to reduce waste in landfills.

SIEMENS

Company Overview

Siemens is a German multinational conglomerate founded in 1847 by Werner von Siemens. It is one of the largest industrial manufacturing companies in the world, known for its wide-ranging operations in sectors such as energy, healthcare, industry, and infrastructure. Siemens is headquartered in Munich, Germany, and operates in over 200 countries. The company is a global leader in digitalization, automation, and electrification, providing advanced solutions for industries, cities, and buildings. With a strong focus on sustainability and innovation, Siemens has consistently ranked among the top companies worldwide in terms of technological development and market presence.

CEO PROFILE



Roland Busch

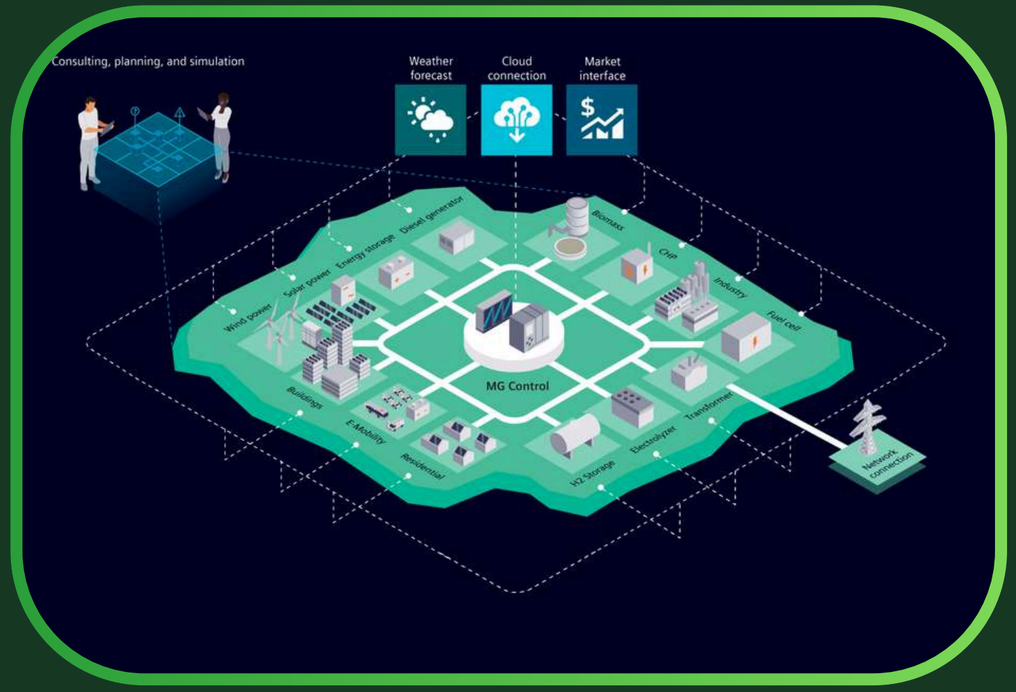
The CEO of Siemens, Roland Busch, took over the position in February 2021. With a background in physics and engineering, Busch has played a key role in driving Siemens' focus on digitalization, sustainability, and smart infrastructure solutions.

SIEMENS

Sustainability Projects ›››



Siemens is a global leader in renewable energy and sustainable technologies, focusing on innovative solutions to enhance energy efficiency and reduce carbon emissions. The company has made significant strides in wind energy, installing wind turbines worldwide to generate clean energy. Siemens is also pioneering in microgrid technologies and energy storage solutions, allowing for more reliable and efficient integration of renewable energy sources into the grid. These efforts aim to improve energy security while supporting the global transition to a low-carbon economy, contributing to the fight against climate change.



1

Microgrids for Sustainability

2

Siemens Gamesa Offshore Wind Farms

3

Green Hydrogen Solutions

Company Overview

Tesla, founded in 2003 and headquartered in California, is a technology companTy focused on electric vehicles and sustainable energy solutions. Led by CEO Elon Musk, Tesla has revolutionized the automotive industry with its innovative electric cars, including the Model S, Model 3, Model X, and Model Y. The company is also heavily involved in renewable energy through SolarCity, providing solar power solutions, and with Powerwall, a home battery system that stores renewable energy for later use. Tesla's long-term vision is to accelerate the world's transition to sustainable energy by combining zero-emission electric vehicles with renewable energy production and storage systems.



CEO PROFILE

Elon Musk

Elon Musk is a billionaire entrepreneur and CEO known for founding and leading groundbreaking companies such as Tesla and SpaceX. He is recognized for his ambitious vision of advancing technology to address global challenges, including sustainable energy and space exploration.

Sustainability Projects



Tesla views renewable energy as a fundamental component of a sustainable future, aiming to accelerate the world's transition to clean energy through innovative solutions. The company focuses on integrating renewable sources into everyday life, exemplified by its development of electric vehicles, solar energy products, and energy storage systems like the Powerwall. Tesla's ambitious projects, such as the Solar Roof and Gigafactory expansions, emphasize the importance of reducing reliance on fossil fuels while promoting energy independence. By creating a seamless ecosystem of renewable energy generation and storage, Tesla strives to empower individuals and communities to harness clean energy, ultimately contributing to a more sustainable planet.



1. **Gigafactory Expansion**
2. **Solar Roof**
3. **Virtual Power Plant (VPP)**

Company Overview

Google is a multinational technology company founded in 1998 by Larry Page and Sergey Brin. Headquartered in Mountain View, California, it is best known for its search engine, which is the most widely used globally. The company offers a variety of products and services, including advertising technologies, cloud computing, software, and hardware, with notable products like Android and Google Chrome. Since 2017, Google has committed to operating on 100% renewable energy, reflecting its dedication to sustainability. As a subsidiary of Alphabet Inc., Google continues to innovate in areas such as artificial intelligence, autonomous vehicles, and smart home technologies.

CEO PROFILE



Sundar Pichai

The CEO of Google is Sundar Pichai, who became the CEO of Google in 2015 and later the CEO of Alphabet Inc. in 2019. With a background in engineering and business, Pichai is known for his leadership in driving innovation at Google, particularly in areas such as artificial intelligence and cloud computing.

Sustainability Projects



Google views renewable energy as a critical component of its commitment to sustainability and environmental responsibility. The company has been a pioneer in the tech industry by achieving its goal of operating on 100% renewable energy since 2017, demonstrating its dedication to reducing its carbon footprint. Google invests heavily in renewable energy projects, including wind and solar farms, to power its data centers and offices. Additionally, through initiatives like the Google Green Program, the company supports innovations in clean energy technology and works with various partners to drive renewable energy adoption across industries. By prioritizing sustainability, Google aims to lead by example, encouraging other companies to adopt similar practices and contribute to a greener future.



1. **Google Cloud Renewable Energy Procurement**
2. **Project Sunroof**
3. **Partnerships for Renewable Energy Expansion**

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Thank You For Your Attention

The choices we make today will shape a sustainable tomorrow. Let's embrace this opportunity to lead by example and inspire change.



FOR MORE INFORMATION

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