# A DESCRIPTIVE STUDY OF SUSTAINABLE DEVELOPMENT GOALS AND THEIR COMPREHENSION IN THE INDIAN CONTEXT

**Abstract** Authors

The competition for growth and excellence has tipped the ecological scales by causing an imbalance in the economic progress of many countries and the depletion of some natural resources. These consequences are already being felt, including climate change and global warming. Since this threatens human existence on Earth itself, action must be taken immediately to protect a safe environment for future generations. Natural resource preservation and ensuring that they are conserved for the benefit of both current and future generations are concepts referred to as "sustainable development." They set clear standards and goals for other nations to accept based on their objectives and worries about the environment on a global scale. Everybody is invited to participate in the Sustainable Development Goals (SDG) agenda. Everyone shall have access to reliable, modern, cheap energy by 2030, according to Sustainable Development Goal 7. (SDG 7). Significant connections and relationships exist between this objective and the other SDGs, notably with goals 1, 3, and 15. Reaching this goal while giving access to affordable and sustainable modern cooking energy would be incredibly challenging, nevertheless, considering previous disastrous Interrelated. well-established attempts. social. cultural, and technological elements that affect poor performance. This goal remains aspirational and unachievable unless these barriers are removed, and a cohesive economic and social agenda is established. Therefore, maintaining the existing policy could not be successful. Additionally, this essay will go into greater detail on socioeconomic causes and the approach India is employing to meet its goals.

**Keywords:** Affordable & clean energy, Sustainable Development Goals, Modern Energy, Socioeconomic factor, Sustainable Development Goal 7.

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#### I. INTRODUCTION

The United Nations General Assembly established the Sustainable Development Objectives (SDGs), often known as the Global Goals, in 2015 intending to achieve all 17 of these interconnected goals by 2030. They are a component of the 2030 Agenda, sometimes referred to as Agenda 2030, which was accepted by the UN General Assembly. The SDGs were designed as the new global development framework to replace the Millennium Development Goals, which reached their expiration in 2015, as a part of the Post-2015 Development Agenda. Despite having broad and connected aims, the SDGs became more "actionable" once the General Assembly of the UN passed a resolution on them on July 6, 2017, two years after they were first adopted.

#### The 17 SDGs are:

- 1. No Poverty
- 2. Zero Hunger
- 3. Good Health and Well-being
- 4. Quality No Education
- 5. Gender Equality
- 6. Clean Water and Sanitation
- 7. Affordable and Clean Energy
- 8. Decent Work and Economic Growth
- 9. Industry, Innovation, and Infrastructure
- 10. Reduced Inequality
- 11. Sustainable Cities and Communities
- 12. Responsible Consumption and Production
- 13. Climate Action
- 14. Life Below Water
- 15. Life On Land
- 16. Peace, Justice, and Strong Institutions
- 17. Partnerships for the Goals

#### II. LITERATURE REVIEW

The concept is based on 17 objectives with 169 targets and a time horizon of 2030, along with a collection of 232 indicators to measure advancement toward SDG attainment. SDG 7 calls for accessible and sustainable energy. In 2030, (1) all people will have access to clean, affordable, dependable, sustainable, and modern energy services, (2) the global share of renewable energy will significantly increase, and (3) the rate of energy efficiency improvements will more than double, (4) investments in clean energy technology and infrastructure will be encouraged, and (5) energy infrastructure will be modernized, among other things (United Nations n.y.). Fossil fuel use must be significantly reduced or abolished by 2050, especially in wealthy nations, to satisfy the Paris Agreement's goals (Intergovernmental Panel on Climate Change 2018).

The goal of sustainable development is to meet humankind's need for a better standard of life while preserving the natural environment. In order to ensure a better and sustainable future for everyone while balancing economic, social, and environmental development, the

United Nations General Assembly adopted the 17 Sustainable Development Goals (SDGs) in 2015. These goals were created to encourage organizational operationalization and integration of sustainability, address the needs of current and future stakeholders, and ensure a better and sustainable future for all. The purpose of this study is to bridge the knowledge gap on which of the 17 SDGs have reciprocal relationships. According to the correlation findings, eradicating poverty (SDG1) and promoting health and well-being (SDG3) work in concert with the majority of the other goals. SDG1 (No Poverty), SDG2 (Zero Hunger), SDG3 (Good Health and Well-Being), SDG8 (Decent Work and Economic Growth), and SDG13 are all intimately tied to SDG7 (Affordable and Clean Energy) (Climate Action). There is a slight inverse relationship between this target and SDG12 (Responsible consumption and production), which highlights the need to boost clean energy usage, enhance the energy efficiency, and encourage sustainable consumer behaviors internationally. SDG12 (Responsible consumption and production), according to Luis Miguel Fonseca, José Pedro Domingues, and Alina Mihaela Dima, is a target that is closely related to trade-offs (April 2020).

Measuring the SDGs and sustainable development to monitor and evaluate the effects of Agenda 2030 is difficult. 2018 Bali Swain Easterly (2015) argues that the SDGs are an encyclopedia where everything is given significant attention, inferring that nothing is significant. Additionally, it is not obvious how the U.N. will continue to work toward achieving the unattainable, impractical SDG goals, such as "achieving full and productive employment and decent work for all women and men," "achieving universal health coverage," "[ending] all forms of discrimination against all women and girls everywhere," and other goals that may be impossible to attain.

In response, the UN General Assembly adopted a list of 17 Sustainable Development Goals in September 2015. (SDGs). Water's importance as a prerequisite for ecosystem health and human development was emphasized (Harlin and Kjellén, 2015; UN-Water, 2015). It is necessary to have a complete grasp of the dynamics of water supply and demand from a global to a local level in order to assess if the SDG targets for water are "SMART," or Specific, Measurable, Attainable, Realistic, and Timely (BWS, 2013). Furthermore, interactions and trade-offs between distinct SDG targets may produce less than ideal or even detrimental consequences if a series of activities is not thoroughly thought out before considering these interlinkages (ICSU, 2016). Scientific research and evidence may considerably aid in the implementation of the SDGs through evaluations and participation in policymaking at all levels, from the international to the local (Lu et al., 2015; Bunn, 2016). This paper discusses the challenges associated with jointly executing and monitoring the SDGs' objectives.

Globally, demand for energy sources, including fossil and renewable fuels, has risen fast. However, in locations with abundant resources, this situation has led to issues that have impaired how women respond to the negative repercussions of unsustainable energy use. Women who live close to energy resources frequently lose their possessions, endangering sustainability. In order to accomplish Sustainable Development Goal 7—Affordable and Clean Energy—capacities of women and assets must be strengthened, according to the study given in this chapter, which contrasts two case studies, Japan and Colombia. Japan and Colombia serve as these case examples. In both circumstances, developing the sustainability talents of exceptional women may advance general sustainable development, and contribute

to the achievement of SDG 7 and Agenda 2030. In addition to providing a capacity-building plan for accomplishing SDG 7 following the other Sustainable Development Goals, this study, which employs a qualitative methodology, also does so (SDGs). In November 2019 (Josh Whereat and Caitlin Power).

Many countries will utilize only renewable energy by the year 2050. Due to the recent high growth in the usage of renewable energy sources (RE) in the world's energy mix as well as its ongoing effects on the global energy sector, the evaluation, and analysis of its effects on reaching sustainable development objectives are not fully addressed in this context. A study of the expanding role that artificial intelligence is playing in the utilization of renewable energy to meet the SDGs is also conducted. By using the three primary pillars of sustainable development, a total of 17 SDGs were divided into three categories, including the environment, society, and economics. The use of a consensus-based expert elicitation process helps renewable energy achieve 75 targets across all sustainable development goals. However, it can make it more difficult to accomplish the 27 goals. In addition, artificial intelligence allows for the use of renewable energy to accomplish 42 out of 169 goals. This effect may ultimately spread to other goals, though, given the current exponential growth of artificial intelligence research, the proportion of renewable energy sources, as well as the overcoming of some existing limitations. November 2021 (MA Hannah)

# III. SUSTAINABLE DEVELOPMENT GOAL NO.7-AFFORDABLE AND CLEAN ENERGY

In 2015, the UN General Assembly established 17 Sustainable Development Goals. One of them is Sustainable Development Goal 7 (SDG 7 or Global Goal 7). Its mission is to "Ensure access to cheap, dependable, sustainable and modern energy for all," as they are essential elements of economic growth, human well-being, and the eradication of poverty. Several linkages and synergies exist between this objective and the other SDGs, especially with goals 1, 3, 4, and 15. The goal consists of five requirements that must be fulfilled by 2030. The aims are being pursued using six indicators.

Out of the five objectives, three are "outcome targets":

- **1. Modern energy available to everyone:** Target 7.1 of SDG 7 reads, "By 2030, guarantee universal access to cheap, dependable, and modern energy services." There are two indications for this target:
  - **Indicator 7.1.1:** Percentage of the population who can obtain electricity
  - **Indicator 7.1.2:** Percentage of the population that relies mostly on renewable energy and technologies. The percentage of people who report using any of these techniques for cooking, heating, and lighting divided by the population as a whole is how this indicator is calculated.
- **2. Increasing the share of renewable energy globally:** SDG 7's target 7.2 is to "significantly increase the amount of renewable energy in the global energy mix by 2030." There is just one sign of it:

- Indicator 7.2.1: The final energy usage includes a portion of renewable energy. 17.5% of the total energy consumed globally in 2016 came from renewable sources. Renewable energy rose the quickest of the three end users in terms of power (electricity, heat, and transportation). This was fueled by the development of wind and solar technology. Renewable energy sources continue to face technological, financial, and regulatory obstacles.
- **3.** Energy efficiency has doubled since last year: Target 7.3, "By 2030, double the worldwide rate of increase in energy efficiency," is the third objective of SDG 7. There is just one sign of it:
  - Indicator 7.3.1: Energy intensity as assessed by GDP and primary energy. To fulfill SDG 7.3, the global primary energy intensity must drop from 5.6 megajoules per USD in 2010 to 3.4 megajoules per USD in 2030. The world's primary energy intensity, as reported in Tracking SDG7: The Energy Progress Report, increased by 1.1 percent annually in 2018 to reach 4.75 MJ/USD (2017 PPP). This is far less than the 2.6 percent annual pace that was initially projected as being necessary to reach SDG 7.3's objective, which now calls for an average annual rate of 3 percent from 2018 to 2030.

### The latter two objectives are "means of attaining objectives":

- ➤ To encourage access to renewable energy research, technology, and investment: SDG 7's Target 7 is the fourth goal. "By 2030, promote investment in clean energy infrastructure and technology. Boost global cooperation to make clean energy research and technology, including renewable energy, energy efficiency, and advanced, cleaner fossil fuel technologies, more accessible. It just has one sign:
- Indicator 7.4.1: Hybrid systems are a focus of the "International Financial Flows to Developing Countries in Support of Clean Energy Research and Renewable Energy Production" report. The international funding flows to poor countries in favor of clean and renewable energy reached \$21.4 billion in 2017, according to a status statement by the UN in 2020. From flows committed in 2010, this is a twofold increase. In 2017, 46% of flows went to hydropower projects, while only 19% went to solar, 7% went to wind, and 6% went to geothermal.
  - ➤ Enhance energy services for poor nations: Target 7. B: By 2030, improve infrastructure and technology to provide all developing nations, least developed nations, small island developing States, and landlocked developing nations with modern and sustainable energy services, following their plans of assistance." There is just one sign of it:
- Indicator 7.5.1: The proportion of GDP that is spent on energy-efficient investments, infrastructure investments, and technological transfers for sustainable development services. No information is available for this indicator as of August 2020. Indicator 7.b.1 was said to be subject to removal in 2020 since it is the same as indicator 12.1.1 of SDG 12.

In other words, these objectives include producing dependable, cost-effective power while increasing the proportion of renewable energy in the world's energy mix. In order to achieve this, we would need to boost energy efficiency, collaborate internationally in order to encourage wider distribution of sustainable energy technology, and spend more money on energy-efficient infrastructure. The plans prioritize providing infrastructure help to developing countries that are landlocked, small islands, and least developed countries. The world is moving toward SDG 7, according to a 2019 report, but at the current rate of progress, the goals won't be reached by 2030. SDG 7 and SDG 13's goals of reducing global warming are closely related and complementary. The world must work more to promote renewable energy if it is to meet long-term climate targets.

#### IV. SOCIOECONOMIC, CULTURAL, AND TECHNOLOGICAL FACTORS:

Socioeconomic and cultural factors also have an impact on the accessibility of modern energy technology (Ni and Nyns, 1996; Urmee and Gyamfi, 2014). Depending on the residence, different amounts of energy are consumed for heating, lighting, cooking, and operating appliances. Many homes in tropical areas lack access to contemporary energy services because the need for energy for cooking outweighs the demand for other energy services. Energy consumption varies between services, as well as between families in rural and urban areas. Rural families need a sizable amount of energy for cooking since they consume a lot of raw food that requires longer cooking times. Additionally, households frequently cook since there is a lack of storage for prepared meals. Regular cooking and prolonged cooking durations result in a high energy demand share. Up to 90% of the total energy consumption in low-income urban and rural households may be used for cooking. Urban dwellings could be able to use the grid to connect and use the energy for cooking. The availability of semi-processed foods, which need less energy than raw foods, is also greater for them. However, for everyday cooking needs and the creation of regional specialties, charcoal continues to be the predominant source of energy. Poor urban dwellings that lack access to electricity or cannot afford it also utilize biomass energy. The results of the study indicate that regional cooking traditions, culture, food preferences, and gender norms all have an impact on the household's decision to continue utilizing firewood for cooking (Malakar et al., 2018). Human attitudes, the practicality of the technology, and regional sociocultural norms all have an impact on who has access to modern cooking energy sources (Kowsari and Zerriffi, 2011). It has been known for more than 20 years that local socioeconomic and cultural elements have an impact on people's decision to embrace and utilize technology on a long-term basis (Masera et al., 2000; Kowsari and Zerriffi, 2011; Mwirigi et al., 2014). The properties of the stoves and their distinctive design are also significant factors in consumer preferences, although socioeconomic concerns were previously recognized as the most important driver of the adoption of improved domestic cooking energy technology (Johnson and Takama, 2012). An energy technology that does not meet local socioeconomic and cultural needs is less likely to be adopted by users. On the other hand, a large number of individuals who lack access to more advanced cooking energy technologies rely on seasonal subsistence farming income from the sale of crops and animals that are unconnected to the established monetary system. Families may not have enough money to pay their electric appliance costs and monthly power bills even if they are connected to the grid. Furthermore, it might not be practical to sell livestock in order to buy energy-saving equipment because livestock is both a source of food and a representation of socioeconomic status. Due to these

restrictions, rural communities frequently lack access to the energy infrastructure and technologies found in metropolitan settings and in settings where money is regulated. As a result, any potential energy solutions for rural regions should rely on locally available resources that are not for profit. All houses having access to affordable, dependable, ecological, and modern energy seems like a high ideal that is far from being realized in developing countries. Furthermore, current global and national energy policies may substantially impact achieving the target.

#### V. ENERGY POLICY

To switch from the old energy system to more effective and efficient energy technology, several steps have been put in place. The ability to acquire technology may be facilitated by rising household income, but its continuous use depends on regional factors and cultural preferences (Masera et al., 2000). Families in rural and urban areas may view their local and cultural environment differently. Urban households are more technologically savvy, have access to the established financial system, and are in a better financial position to embrace advanced energy technologies than their rural counterparts. The Sustainable Development Goals are a second global agenda that consists of 17 interconnected objectives. SDG 7 aims to guarantee that everyone has access to reasonably priced, dependable, sustainable, and contemporary energy by 2030. This goal seeks to address five crucial issues related to technical dependability, system sustainability from an environmental and resource perspective, and the availability of better and more advanced technologies for all people. To do this, all inhabitants' socioeconomic conditions must rise, making it possible for them to buy modern energy technologies or offer low-cost technologies that the underprivileged can afford. The second issue that SDG 7 attempts to solve is the availability of consistent power for everybody. It entails enhancing productivity and updating the infrastructure to ensure uninterrupted delivery of renewable energy. This calls for either eliminating all losses from the current energy system or adding a backup system to make up for them. The existing system must be improved in addition to investing in new infrastructure that promotes accessibility, which may need additional costs. The provision of clean, efficient, and environmentally friendly energy services is related to the discussion of sustainability. It focuses on the development of renewable energy sources, which brings up questions like accessibility, delivery, and suitability. In addition, it is hard to extend energy availability to everyone in the current socio-economic and settlement environment, especially in rural areas, a problem that off-grid energy cannot solve at cost-effective rates.

In order to fulfill goal seven and other Sustainable Development Goals, such as goals 3 and 5 which are focused on achieving gender equality, climate action, and living on land, respectively, it is imperative to give clean cooking energy technology a high priority (Rosenthal et al., 2018). Other development objectives must be changed in order to meet energy-related sustainable development objectives. Access to more advanced energy technologies would be increased by boosting the local economy and eradicating poverty, but this would not be sufficient to bring about the shift. The vicious cycle of low earnings resulting in constrained access to contemporary energy services can be broken by households improving their lifestyle and purchasing power with higher incomes. It will be necessary to mobilize major local and international resources for this, as well as to develop a pro-poor policy strategy that integrates energy provision into socioeconomic development.

#### VI. CLEAN SOLAR ENERGY SDG7: INDIA'S CHALLENGES

There are several strong reasons to convert to cleaner, more sustainable energy sources, including climate change, poor air quality, and a rise in fatalities. The UN's Sustainable Development Goals (SDGs) number 7 states that as a result, citizens and governments throughout the world have higher expectations for sustainable energy. Alarming air quality levels have been documented in several Indian cities as well as other parts of the world, underscoring the state of the environment's decline and the hefty price that people are paying for the harm it causes to their health. 13 Indian cities are among the 20 worst cities for air quality, according to recent WHO assessments. As a result, we must put a lot of work into creating clean energy.

In order to attain 20 GW of solar power by 2022, the Indian government established the National Solar Mission (NSM) in 2010. But Prime Minister Narendra Modi has set the lofty goal of producing 100,000 megawatts of solar energy by 2022. Moreover, 60% of the power produced in our nation is produced using coal, while just 23.39% of the energy consumed is from renewable sources (MNRE).

In accordance, the Ministry of New and Renewable Energy (MNRE), started several efforts to promote solar energy, including net metering systems and rooftop solar PV plants for remote and hilly areas. The French and Indian governments founded the International Solar Alliance (ISA), which is headquartered in India and has 120 members. To utilize the enormous solar power available worldwide, India is developing the "One Sun, One World, One Grid" and "World Solar Bank" ideas.

## VII. THE INDIAN TRENDS OF SOLAR POWER

India has improved steadily since 2008 in terms of expanding its solar power capacity. From 3 MW in 2008–2009, installed capacity has grown to 8000 MW (8GW) by July 2016. India has established a goal of 100 GW by 2022, of which 60 GW will come via land-based grid connections and 40 GW would come from rooftop grid interaction.

India has a significant base and potential for renewable resources. India is the third-largest power-generating nation in the world as of August 31, 2020, with a total installed capacity of 372.69 GW. 35.94% of India's installed electricity comes from hydropower and renewable sources. The private sector now contributes 155 GW (45.2%) of the total installed capacity, followed by the state and federal governments with 84 GW (24.6%) and 103 GW (30.2%), respectively. The percentage of renewable energy has rapidly increased, going from 3.5 GW in 2002 to 69 GW in 2018.(Photo courtesy of MNRE, the Indian Agency for the Development of Renewable Energy.)

#### VIII. INDIA PROGRESS RECORDS ON SUSTAINABLE DEVELOPMENT GOALS

The most current NITI Aayog SDG India Index, which evaluates the country's achievements in social, economic, and environmental development during the preceding year, shows that India has consistently made progress toward reaching the Sustainable Development Goals (SDGs) of the United Nations. An official NITI Aayog release claims

that due to national advancements, India's total SDG score rose from 60 to 66 in 2021, with increases in "Cheap and clean electricity," "clean water," and "sanitary conditions."

Across the nation, access to inexpensive, clean power, clean water, and sanitary facilities has improved.

Himachal Pradesh, Tamil Nadu, Andhra Pradesh, and Goa were included after Kerala in order of the index's ranking.

The most recent SDG India Index edition focuses on the function and significance of partnerships in this endeavor, with the 2030 Agenda having been completed in one-third of its planned time. According to Shri Amitabh Kant, CEO of NITI Aayog, "the study explores the relationships we've built and developed as part of our SDG initiatives. The tale highlights how collaborative actions may lead to greater outcomes and bigger benefits."

#### IX. STATUS OF SUSTAINABLE DEVELOPMENT GOAL 7 IN INDIA

Without supplying the growing engine with fuel, advancement is impossible. People who lack dependable energy access are denied the chance to contribute to societal and global advancement. And yet, there are one billion people without access to energy globally. 39% of the world's population, or more than 781 million people, lacked access to clean cooking fuels and technologies in 2016

By 2030, Goal 7 of the Sustainable Development Goals aspires to close this enormous gap and guarantee that everyone has access to affordable, dependable, and cutting-edge energy services. For increasing energy availability, energy efficiency improvements and renewable energy investments are essential.

With access expanding at double the rate of population growth, Asia has been the sector's main driver of success. Emerging areas, mainly parts of Asia, were responsible for 72% of the increase in energy consumption from modern renewable sources between 2010 and 2012. Renewable energy sources are limitless and pure, including wind, water, sun, biomass, and geothermal energy. Despite being the solution to the climate calamity, renewable energy today only makes up about 15% of the world's total energy use. Instigated by SDG 7 on globally accessible, efficient, clean, and dependable energy sources and services, it is past time for a new global partnership on sustainable energy for everyone.

#### X. INDIA (AS PER UN2016)

- 1. Nearly 85% of the people have access to electricity
- 2. 100% of villages electrified -30 million households still lack access to electricity (about 300 million people)
- 3. By 2022, the National Solar Mission has set a goal of 175 GW of renewable energy, of which 100 GW will come from solar energy, 60 GW from biomass, and 5 GW from micro hydro projects.

According to certain estimations, energy availability in India has a significant economic potential of \$48 billion annually by 2030. The industry is far smaller than it may be

notwithstanding the prize. According to a recent report by India's DRE industry association Clean Energy Access Network, the country's DRE sector deployed 3.6 million solar lamps, 92,000 solar home systems, 206 mini-grids, and 144 productive usage projects based on insufficient data for the Fiscal Year 2016–17. (CLEAN). It may develop even more quickly with a more supportive policy in place and the money that such policy would free up.

#### XI. INDIA- CHINA PARTNERSHIP

New research estimates that India would need to raise US\$405 million to achieve the SDG 7 goal. China and India are working together to provide business solutions that support the growth of sustainable infrastructures, such as renewable energy technology. 17 business opportunities relating to energy issues are described in the 2017 Business and Sustainable Development Commissions Report, with a potential total value of US\$ 4.3 trillion in 2030 at current prices. Crowding in the private sector and public-private partnerships at the national and international levels present significant opportunities for businesses in the energy sector. As two of the world's largest energy consumers, China and India, complimentary business potential combined with energy security are essential for both nations.

# XII. COMPREHENSIVE CONCLUSION REGARDING SUSTAINABLE DEVELOPMENT GOAL NO.7

The energy needed to power your gadget is available to you if you are reading this on a computer or smartphone. It's extremely different from how other people throughout the world are able to obtain and use energy. You and everyone else in the world share the fact that our decisions about the production and use of energy have an impact on the entire planet. How can we work together to advance energy equality so that everyone has access to the energy they require for living, working, growing food, and other essential activities while simultaneously making sure that our generation and use of energy do not harm the environment?

Leaders from 193 countries have endorsed Goal 7 of the Sustainable Development Goals (SDGs), which calls for achieving universal access to reliable, affordable, sustainable, and modern energy by 2030. The Sustainable Development Goals are a collection of 17 connected goals comprising, over the course of the next 15 years, which aim to alter our planet by eradicating all kinds of poverty, reducing inequality, and enhancing the condition of both natural and man-made surroundings.

Here are five crucial details about Goal 7 of the Sustainable Development Goals, as well as some educational tools, that might assist young people in learning about and participating in global citizenship.

1. A fifth of the population cannot access modern energy: Lack of power has a tremendous influence on people's life. According to the United Nations, "students may study after dark thanks to electricity." It permits the refrigeration of goods and medicines as well as the pumping of water for crops. Although development in the last two decades has significantly increased global energy access, some regions of the world, such as Sub-Saharan Africa and South Asia, continue to lag. Women no longer need to spend their

time and safety collecting wood across long distances for cooking and heating purposes thanks to modern fuels.

- 2. Three billion people use wood, coal, charcoal, or animal waste as their primary fuel source for cooking and heating their houses: "Sustainable Energy for All: Achieving Universal Energy Access" claims that the use of these fuels for heating and cooking increases indoor air pollution, which claims the lives of almost four million people every year.
- 3. By making up over 60% of all greenhouse gas emissions worldwide, energy is the main cause of climate change: Even though the intensity of the impacts and the sources of the emissions are not comparable, the effects of human-related greenhouse gas emissions may be seen everywhere around the world. According to Global Goals, with only 4% of the world's population, America generates 25% of the world's fossil fuel-related carbon dioxide emissions.
- **4.** Long-term climate goals include reducing the carbon intensity of energy as a fundamental target: Developing and making low-carbon and renewable energy sources more widely available would help reduce carbon emissions and their adverse effects on the environment while also supplying electricity to more people throughout the world.
- 5. Women are more likely than males to practice energy conservation since they control and utilize the majority of the energy in many families throughout the world: According to the UN Industrial Development Organization and UN Women's report "Sustainable Energy for All: The Gender Dimensions," women use 22 percent less energy than men in some situations and are "more receptive than men to energy conservation efforts and are more willing to change their everyday behavior to save energy."

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