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Ensuring access to affordable, reliable, sustainable and modern energy for all

Report of the Secretary-General

Summary

Submitted pursuant to General Assembly resolution 77/170, the present report provides an overview of the progress made towards ensuring access to affordable, reliable, sustainable and modern energy for all. The report also provides an overview of follow-up to the high-level dialogue on energy and the United Nations Decade of Sustainable Energy for All (2014–2024), including relevant efforts to inform the review of Sustainable Development Goal 7 at the high-level political forum on sustainable development and the Sustainable Development Goals Summit, as well as a global stocktaking of Goal 7 to be held in 2024 marking the completion of the Decade. It also provides an update on UN-Energy efforts towards strengthening coherence and coordination within the United Nations system in support of Goal 7.







A/78/201

I. Introduction

1. The present report is submitted pursuant to General Assembly resolution 77/170, in which the Assembly requested the Secretary-General to submit, at its seventy-eighth session, a report on the implementation of the resolution, including activities carried out to mark the United Nations Decade of Sustainable Energy for All.

II. Ensuring access to affordable, reliable, sustainable and modern energy for all at the midpoint of the 2030 Agenda for Sustainable Development

2. With only seven years left to achieve the Sustainable Development Goals, the promise of the 2030 Agenda for Sustainable Development is in peril. The fragility of past hard-earned progress has been compounded by the climate crisis, conflict, a gloomy global economic outlook and the lingering effects of the coronavirus disease (COVID-19) pandemic.

3. The climate crisis is worsening as greenhouse gas emissions continue to rise. Global temperatures are likely to reach the critical 1.5°C tipping point above pre-industrial levels by 2035. Catastrophic and intensifying heat waves, droughts, flooding and wildfires have become far too frequent.

4. Energy is an essential ingredient for getting the world back on track towards meeting the Goals and the objectives of the Paris Agreement on climate change. The review of Goal 7 at the 2023 high-level political forum on sustainable development has underscored that although it is currently off track, it is still possible to achieve Goal 7 by 2030 through rapid acceleration of global efforts in the next 7.5 years.

5. Efforts must be scaled up and accelerated to ensure effective follow-up to the high-level dialogue on energy held in 2021 and the implementation of the United Nations Decade of Sustainable Energy for All (2014–2024) to achieve Goal 7 by 2030.

III. Progress towards ensuring access to affordable, reliable, sustainable and modern energy for all¹

A. Global overview

6. Despite some progress on some of the indicators, the current pace is not adequate for achieving any of the 2030 targets. Among the major economic factors impeding the realization of Goal 7 globally are the uncertain macroeconomic outlook, high levels of inflation, currency fluctuations, debt distress in a growing number of countries, lack of financing, supply chain bottlenecks, tighter fiscal circumstances and soaring prices for materials.

7. Although certain policy responses to the global energy crisis appear likely to improve the outlook for renewables and energy efficiency, other necessary policy actions, as well as financial flows, continue to lag behind. In particular, challenges

¹ The present report draws on the following documents: the policy briefs in support of the 2023 high-level political forum, compiled by the technical advisory group on Goal 7; and *Tracking SDG7: The Energy Progress Report* (2023), a joint report of the International Energy Agency, the International Renewable Energy Agency, the Statistics Division of the Department of Economic and Social Affairs, the World Bank Group and the World Health Organization.

concern the lack of universal access to electricity and clean cooking in developing economies, with projections indicating that Goal 7 will not be reached by 2030.

Access to electricity

8. Target 7.1 on ensuring universal access to affordable, reliable and modern energy services is off track, with an estimated 675 million people still without access to electricity.

9. The share of the global population with access to electricity increased from 84 per cent in 2010 to 91 per cent in 2021, with 1.1 billion people gaining access during that period. After accounting for population growth, the global population without access to electricity fell from about 1.1 billion in 2010 to 675 million in 2021. In the period 2019–2021, the number of people with access increased by 114 million per year, fewer than the 129 million who had access each year between 2010 and 2019.

10. The world's electricity access deficit is primarily concentrated in sub-Saharan Africa, where three quarters of the population is without access. Access to electricity remains a major barrier to socioeconomic development in sub-Saharan Africa, home to more than 80 per cent of the global population lacking access to electricity in 2021. Despite steady progress in the access rate over the past decade, the number of people without access in the region remained stagnant because of population growth, leaving 567 million without access in 2021.

11. To close the electricity access gap, it has been estimated that the annual rate of growth in electrification would have to rise to 1 percentage point per year from 2021 onwards – almost twice the current pace of 0.6 percentage points in the period 2019–2021.

12. If no additional efforts and measures are put in place, some 660 million people, mostly in sub-Saharan Africa, will still remain without access in 2030.

Access to clean cooking solutions

13. In 2021, 71 per cent of the global population had access to clean cooking fuels and technologies, an increase of 14 points since 2010. Despite the progress, some 2.3 billion people still use polluting fuels and technologies for most of their cooking.

14. The global access rate has been improving slowly over the past few decades. If current trends continue, only about 77 per cent of the global population will have access to clean cooking fuels and technologies by 2030. That would leave 1.9 billion people continuing to rely on traditional and inefficient stoves paired with solid fuels (wood, charcoal, coal, crop waste) and kerosene for cooking.

15. The increase in access during the period 2010–2021 was led by Brazil, China, India, Indonesia and Pakistan, where the combined access rate rose from 49 per cent in 2010 to 77 per cent in 2021. The global access rate for all other low- and middle-income countries has remained stagnant (from 48 per cent in 2010 to 52 per cent in 2021).

16. The access deficit has decreased consistently in Eastern and South-Eastern Asia since 2000, and in Central Asia and Southern Asia since 2010. However, in sub-Saharan Africa, there has been a clear upward trend in the deficit, as access to clean cooking has failed to keep pace with growing populations.

17. Owing to the ongoing impact of the COVID-19 pandemic and soaring energy prices, the International Energy Agency estimates that 100 million people who recently transitioned to clean cooking may revert to using traditional biomass. Unless efforts are rapidly scaled up now, polluting cooking fuels and technologies will

continue to claim millions of lives each year while perpetuating gender inequality, deforestation and climate change.

18. To achieve the goal of universal access to clean fuels and technologies for cooking, it is estimated that access gains need to increase by at least 3 per cent annually until 2030, compared with 1 per cent over the 2010–2021 period.

Renewable energy

19. The share of renewable energy in total final energy consumption reached 19.1 per cent in 2020, owing to overall reduced energy consumption during the COVID-19 pandemic. However, it was not expected that such a notable increase would be repeated in 2021, as total final energy consumption was anticipated to rebound close to pre-pandemic levels with the recovery of economic activity and restrictions of movements being lifted in most countries.

20. The largest increase in the share of renewables has been for electricity, reaching 28.2 per cent in total, while the transport and heat sectors have had much slower progress, or none at all.

21. Renewable energy consumed for heating increased 0.9 per cent to 42 exajoules (EJ) in 2020. Unfortunately, traditional uses of biomass represented almost 60 per cent of that growth, increasing the scale of negative health, social and environmental impacts from the lack of access to clean cooking. The increase was mainly caused by such factors during the COVID-19 pandemic as disrupted deliveries of clean cooking fuel and imposed working restrictions, reducing the ability of consumers to afford modern fuels and pushing many back to the traditional uses of biomass.

22. The transport sector, affected as it was by policy responses to the pandemic, saw a 14 per cent (-16.6 EJ) decline in global final energy consumption in 2020. Biofuel consumption for transport declined together with oil consumption, leading to the largest reduction among renewable energy source consumption between 2019 and 2020, at an estimated 4 per cent (-0.16 EJ). This was the first reduction in annual production in two decades. This brings the total share of renewable energy to 4 per cent (up from 3.6 per cent in 2019) for this sector, only 0.9 percentage points higher than in 2015.

23. Enhancing renewables-based electricity supply in developing countries deserves particular attention. Positively, developing countries saw a record-breaking renewable capacity growth in 2021 (+9.8 per cent year-on-year), with cumulative installations reaching 268 watts per capita. However, this growth is unevenly distributed, and further action is required, especially in the least developed countries.

24. If the world is to be on track to limit the temperature rise to less than 1.5° C throughout the century, the share of renewables must reach 33 to 38 per cent of global total final energy consumption by 2030. In the power sector, renewables would need to account for 60 to 65 per cent of electricity generation.

Energy efficiency

25. Target 7.3 calls for doubling the global rate of improvement in energy efficiency over the average rate during the period 1990-2010 – which means improving energy intensity by 2.6 per cent per year between 2010 and 2030. However, progress between 2010 and 2020 averaged only 1.8 per cent. To make up lost ground, improvement in energy intensity must now exceed 3.4 per cent globally from 2020 to 2030 – twice the rate achieved in the past decade. An even greater improvement would be needed to be on track to limit the end-of-century temperature rise to less than 1.5° C.

26. Primary energy intensity improved at a consistently higher rate over the past decade (2010–2020) than it did in the previous two (1990–2010). However, the rate of improvement declined to 0.6 per cent in 2020, largely because of COVID-19-induced lockdowns and travel restrictions and the radical shifts in the global economy that accompanied the initial lockdowns in that year. This makes 2020 the worst year for energy intensity improvement since the global financial crisis, with worldwide energy intensity declining to 4.63 megajoules (MJ) per (2017) dollar.

27. Doubling the global rate of energy intensity improvement by 2030 and thus achieving Target 7.3 is key as it also supports the other targets under Goal 7. Between 2010 and 2020 the average annual rate of improvement in global primary energy intensity was 1.8 per cent. Although this was better than the rate of 1.2 per cent between 1990 and 2010, it is well below the Target 7.3 aim of 2.65 per cent.

28. Annual improvement until 2030 will now need to average 3.4 per cent to meet Target 7.3. Estimates for 2021 point to a continued lack of progress in intensity improvement due to the COVID-19 crisis, although early estimates for 2022 suggest a rebound to higher levels of improvement, aided by renewed policy support and urgency in the wake of the energy crisis.

Means of implementation

29. Reaching Goal 7 and net-zero emissions requires an urgent and steep rise in clean energy investment and finance. Worldwide investment in clean energy and energy efficiency will need to triple over the next 10 years to put the world on track for net-zero emissions by 2050, with a priority focus on the needs of the world's least developed countries and universal access to electricity and clean cooking by 2030. This is a massive opportunity and one that requires concerted policy interventions, public finance and private investments to be realized at the required scale.

30. Directing international public financial flows towards clean energy solutions has become more difficult since 2020 because of the reallocation of public resources to recovery from the COVID-19 pandemic.

31. International public financial flows to developing countries in support of clean energy amounted to \$10.8 billion in 2021, an 11.4 per cent drop from 2020, 35 per cent less than the 2010–2019 average and only about 40 per cent of the 2017 peak of \$26.4 billion. The downward trend in public investments is expected to have continued in 2022; data released in 2023 will provide a clearer picture of the impacts of the energy crisis in Europe sparked by the war in Ukraine on public financial flows.

32. Financial commitments continued to shift from hydropower to solar energy in 2021. Solar energy attracted the largest share of public financial flows (43 per cent), followed by multiple/other renewables (33 per cent) and hydropower (16 per cent); wind and geothermal energy received less than 10 per cent of total flows. After focusing mainly on hydropower before 2010, a growing share of public financial flows have been targeted at supporting solar technology, including through multipurpose green funds and support for infrastructure.

33. Public financial flows are becoming marginally more widely distributed among countries, although they remain heavily concentrated. During 2010–2019 period, 36 countries received 80 per cent of all commitments; over the longer 2010–2021 period, the number increases slightly to 38, including commitments to unspecified countries without allocations and unspecified subregions without allocations. The share of countries that received no commitments fell to less than 20 per cent in 2021; over the past decade, only three countries received no international commitments. Flows to the countries most in need (least developed countries, landlocked developing

countries and small island developing States) fell in 2021, and these countries had lower flows in absolute terms than others.

34. Even as international public financial flows declined by 13 per cent in 2020 and by another 11.4 per cent in 2021, several regions saw increases in 2021. In 2021, North America and Europe received 81 per cent more funding than in 2020 (an increase of \$180 million); flows to sub-Saharan Africa rose by 45 per cent (an increase of \$1,213 million); and flows to East Asia and South-East Asia increased 23 per cent (an increase of \$251 million). In other regions, flows declined. Latin America and the Caribbean experienced the largest drop in international public finance, at 62 per cent (a decline of \$2,295 million). Flows declined by about 59 per cent (\$582 million) in West Asia and North Africa, 42 per cent (\$9 million) in Oceania, and 8 per cent (\$232 million) in Central Asia and South Asia.

35. Financial commitments to developing countries must increase, given the need to scale up overall renewable energy investments substantially in order to reach the targets for Goal 7. Higher public financial flows will surely be needed in the short term, in light of COVID-19 and the effects of the armed conflict in Ukraine, particularly with the least developed countries falling furthest behind in reaching Goal 7.

36. The share of debt instruments in international public finance declined steadily after 2018; in 2021, it stood at two thirds of public financial flows, down from nearly 90 per cent in 2018. The share of grants, equity and guarantees increased. The increase in grants is a boon to recipient countries, as these instruments do not carry the burden of future repayment. At the same time, the absolute decline in loan flows – which typically make up a substantial portion of public financial flows for projects – makes it harder to secure finance for both larger, commercially viable projects and start-ups with limited resources.

37. With the limited availability of public resources, their strategic use to mobilize in additional private capital is key, especially in sectors and regions that private investors perceive as too risky to invest in. The predictability and reliability of policies and regulations are a vital consideration for attracting investors, as it reduces risks related to policy reversals or renegotiations. In this regard, governments have a key role to play in the establishment of stable and coherent policy and regulatory frameworks.

38. There are significant and persistent policy, technology, finance-related and social challenges to energy innovation, technology development and deployment, and data improvement. Existing technologies are underdeployed, and approximately half of the technologies necessary to meet the 2050 target are still in the early stages of development and demonstration.

39. Countries need well-trained and skilled people to work on energy projects in order to meet their renewable energy ambitions. Support for educational and training programmes, including digital capacity programmes on sustainable energy, to build local knowledge and capacity, and promote renewable energy projects are critical, as are scaling up capacity-building efforts, including for enabling frameworks, technology cooperation, investment measures, the transfer of technical know-how and staff training activities.

B. Regional overview

40. As in previous years, rates of progress vary significantly across regions, with some regions making substantial gains towards some targets, while in other cases progress is slowing or even moving backwards.

Africa

41. The constraints on African economies and communities brought on by the continent's persistent energy access deficit have recently been made worse by the global energy crisis. The crisis, in turn, has been brought on by the COVID-19 pandemic, the war in Ukraine and the growing impact of climate change.

42. A massive energy access deficit on the continent must be closed urgently and at scale if the Goals are to be achieved. The continent has an abundance of energy resources, both renewable and non-renewable, yet public resources are highly constrained. At the same time, there are low levels of private sector investment in Africa's energy transformation and limited support for recovery from financial hardship.

43. The continent has made progress towards universal energy access in recent years. Electricity coverage increased from 44 to 56 per cent of the continent's population between 2010 and 2020. However, many African countries are not on track to achieve the Goal 7 target of ensuring everyone can access affordable, dependable, sustainable and modern energy. Access to reasonably priced and reliable modern energy services is also a crucial prerequisite for advancing many of the Goals.

44. The world's electricity access deficit is primarily concentrated in sub-Saharan Africa, where three quarters of the population is without access. In sub-Saharan Africa, the number of people without access was roughly the same in 2021 as in 2010.

45. Between 2010 and 2020, the number of Africans needing access to clean cooking solutions increased by 170 million to about 937 million due to population growth and insufficient investment in clean cooking options.

46. Meanwhile, renewables' penetration is still slow, and as a result, has a limited impact on the African population, even though almost all countries in the region present great opportunities for investments in the renewable energy sector. Africa has the lowest share of modern renewable energy compared to other continents and the world, at 7.6 per cent of total final energy consumption. Meanwhile, total installed renewable power capacity (including hydropower) rose by 107 per cent between 2010 and 2020, from 27 gigawatts (GW) to 56 GW.

47. Due to the continent's heavy reliance on the usage of solid biomass, the proportion of renewable energy in total energy consumption increased slightly, from 56.6 per cent to 57.1 per cent, between 2010 and 2020.

Arab region

48. While the Arab region has made progress recently towards achieving the Goal 7 targets, urgent efforts are still vital if these goals are to be achieved by 2030.

49. The region retains an overwhelming reliance on fossil fuels, even though some Arab countries have made substantial progress on utility-scale renewable electricity generation. Many of these world-leading projects are set to come online in 2023, too, while five Arab countries have also pledged to achieve economy-wide net-zero emissions by 2050 or 2060.

50. Access to electricity in the Arab region was almost 91 per cent in 2021, with many countries having reached 100 per cent. Nevertheless, conflict, political instability and utility sector mismanagement left nearly 42 million people without electricity access that year, across the region. Rural areas suffered the largest deficits. In these, only 83 per cent of the population had access to electricity, compared to 98 per cent in urban areas. The rural-urban divide was most prominent in the least

developed countries of the region. In these, urban electricity access averaged 84.5 per cent, while in rural areas, it averaged only 52 per cent.

51. While 88 per cent of the population has access to clean fuels and technology for cooking in the Arab region, there are large subregional disparities. In 2021, 52 million people in the Arab region did not have access to clean cooking, a slight increase from 2019. About 88 per cent of these people lived in Somalia, the Sudan and Yemen. Djibouti and Somalia were the countries with the highest share of their populations lacking access to clean fuels, at more than 90 per cent.

52. With gross domestic product (GDP) calculated according to a 2017 purchasing power parity baseline, energy intensity in the Arab region increased from 5.11 MJ per dollar in 2019 to 5.17 MJ per dollar in 2020. Over the past decade, however, energy intensity has decreased, having stood at 5.2 MJ per dollar in 2010. This trend was not uniform, however: while the Gulf Cooperation Council and Mashreq subregions saw this decline in energy intensity, the Maghreb and least developed countries in the Arab subregions saw intensity increase over the same period.

53. In the Arab region, renewable energy penetration rates continued to lag behind other geographical areas. Only 5.1 per cent of the region's total final energy consumption was generated by renewables in 2020, with this mainly accounted for by solid biofuels. Three countries (Egypt, Somalia and Sudan) accounted for 72 per cent of the region's renewable energy consumption in 2020.

54. Total installed renewable electricity capacity in the Arab region has roughly doubled over the past decade, reaching a little over 22 GW in 2021. In 2020, solar and wind energy accounted for nearly 12 per cent of the region's renewable energy consumption, up from 11 per cent in 2019, with solar being the fastest-growing renewable source for power generation.

Asia and the Pacific

55. Despite significant progress, the pace of transition to clean energy is uneven and incremental across the Asia and Pacific region, highlighting the need for scaled-up technical and financial support. Greater efforts are needed to put the region on track, especially given the setbacks that economies face due to the disruption caused by the war in Ukraine and the COVID-19 pandemic.

56. Between 2016 and 2021, almost 380 million people gained access to electricity in the Asia and the Pacific region. Over that period, the region's population increased by 180 million, leading to a rise in the rate of electrification from 94.0 per cent to 98.6 per cent.

57. In 2021, almost 1.2 billion people – nearly one quarter of the population of the Asia and the Pacific region – were without access to clean cooking. The region is not on track to meet this target of Goal 7 of universal access to clean cooking by 2030. This is especially the case in rural areas, where the access rate stood at 57 per cent.

58. In recent years, the region has been in the lead globally for renewable energy development, particularly in the power sector, where renewables now present the lowest-cost option in many circumstances. However, although renewable energy installations are increasing in number, they still constitute a relatively small share of total final energy consumption in many countries due to the overall growth in energy demand. In 2020, modern renewable energy accounted for 12.5 per cent of total final energy consumption in the region. This pushed the overall share of renewables – including both modern and traditional forms – to its highest level so far, at 19.1 per cent. While renewables have not increased at the same scale in the heating and transport sectors, electrification of end uses provides great opportunities for further progress.

59. A significant gap remains, however, between the progress made by the region's wealthier nations and its developing countries, despite an impressive sixfold growth in renewable generating capacity since 2010. Those countries with a high income or upper-middle income have witnessed a remarkable threefold surge in renewable energy installations, while those with a low income or lower-middle income have made only minimal progress on a per capita basis.

60. Energy intensity in the region's emerging economies continues to be relatively high compared to its developed countries. Many smaller countries are not achieving sufficient improvement, and this means that further policy attention in this area is required.

Latin America and the Caribbean

61. The Latin America and the Caribbean region has made significant progress in terms of access to electricity in recent years, reaching a 96.5 per cent access rate in 2021. There are, however, still significant inequalities accentuating energy poverty. The most vulnerable fifth of the population has about nine times less access to electricity than the richest. In recent years, energy efficiency has not increased, either, except for a slight improvement in the transportation sector, which consumes the largest proportion of fossil fuel energy.

62. In 2021, 96.5 per cent of the population in both urban and rural areas had access, while the proportion of the population with primary reliance on clean fuels and technology was 62 per cent. Most of the 16.1 million people who are not connected to electricity in Latin America and the Caribbean live in rural and remote areas where the costs of extending networks and infrastructure are high.

63. In the region, 78 million people do not have access to clean cooking fuels and technologies. Indicators prior to the COVID-19 pandemic already showed that households across the region were allocating a high proportion of their spending to fuel. Indeed, this could reach up to 10 per cent of their total expenditure. Electricity can account for up to 5 per cent of household spending, while in most countries the percentage can be up to four times higher for the most vulnerable quintiles.

64. In 2021, the level of renewable electricity generation within the energy mix increased to an average of 59 per cent. In particular, during 2021, wind and solar continued to expand. A total of 23.5 GW of new capacity in electricity generation was installed around the region that year. Of this total, non-renewable thermal power plants accounted for 4.5 GW, wind power plants 5.9 GW, solar photovoltaic power plants 9.8 GW, hydroelectric power plants 2.423 GW and the rest was composed of renewable, biogas and biomass thermal power plants. This meant 81 per cent of the total was based on renewable energy.

65. Regional energy intensity decreased by 17 per cent in the three decades to 2020. That year, the energy intensity level of primary energy, using constant 2017 GDP at purchasing power parity, was 3.31 MJ per dollar. Transport, which uses 36 per cent of the energy in the region, was the only productive sector that experienced a slight increase in efficiency over the above period.

Member States of the Economic Commission for Europe

66. Even before the crises and challenges of recent years, progress in the Economic Commission for Europe (ECE) region towards achieving Goal 7 was already too slow to meet the 2030 target. Amid an overall positive Goal 7 implementation trend, this report confirms the gap between actual progress and what would be required for the achievement of Goal 7.

67. Although access to electricity and the use of clean fuels for cooking, heating and lighting is widespread in the ECE region – and deployment of renewable energy had been increasing and energy efficiency has also been improving – the rate of progress has not been high enough to make the energy targets of Goal 7 achievable.

68. Particular challenges include the affordability of clean fuels and technologies, which is particularly acute for low-income households but is a growing problem across the region; a shortage of skills and qualifications, which can be seen particularly in the deployment and maintenance of clean energy technologies; and persistent behavioural barriers, which often act as an obstacle to optimal organizational potential.

69. The ECE region accounts for almost half of the 1,971 GW renewables installed worldwide. In 2020, 44 ECE member States had a share of renewable energy in their energy mix above 10 per cent, as compared to 26 countries in 2000 and 40 countries in 2015. The region has seen unprecedented growth in renewable electricity, but that is not the case in transport sector or space heating and cooling.

70. Public and private investment in renewable energy across many ECE countries remains modest compared to global growth trends. For instance, investments in 17 countries of South-Eastern and Eastern Europe, the Caucasus and Central Asia are particularly insufficient.

71. There has been some progress on energy efficiency, but much more remains to be done. The regional average energy intensity fell from 7.19 MJ per dollar in 2000 to 4.18 MJ per dollar in 2019. However, inconsistencies in the rate of improvement can be observed between countries.

Least developed countries, landlocked developing countries and small island developing States

72. Urgent international attention is needed to address the inequalities in access to sustainable energy that are faced by the least developed countries, landlocked developing countries and small island developing States. Unless efforts are scaled up significantly in these countries, the world will fall short of its Goal 7 target of universal access to affordable, reliable and modern energy services by 2030.

73. Supported by technological leapfrogging, faster deployment of renewables in least developed countries, landlocked developing countries and small island developing States can help to bridge the sustainable energy access gap, strengthen energy security and support climate goals. A major shift in strategy is required, however, to significantly increase these countries' access to accessible and appropriate financing and support clean or low-carbon energy initiatives. In this regard, public finance remains crucial to de-risking and mobilizing private sector investment, bringing new markets to maturity in these countries.

74. Currently, international public finance in support of energy is still concentrated in a few countries and on larger projects. Therefore, a concerted effort is needed by developed countries, governments and international organizations to support local enterprises in the least developed countries, landlocked developing countries and small island developing States, particularly small and medium-sized enterprises, off-grid developers and organizations led by women.

75. In 2021, electrification rates in the least developed countries and landlocked developing countries continued to rise, but remained low, at 56 per cent and 60 per cent respectively. Access to electricity is higher in small island developing States, at 76 per cent. This still meant, however, that 481 million people in the least developed countries were without any access to electricity in 2021. This figure was almost two thirds of the total global population lacking access.

76. An estimated 32 million people a year in the least developed countries had access to electricity between 2019 and 2021. However, this rate needs to more than double to 63 million new connections per year if the goal of universal access is to be achieved by 2030.

77. In line with worldwide trends, in the least developed countries, landlocked developing countries and small island developing States advances in access to clean cooking have been slower than in electrification over the past 10 years. The proportion of the population with access to clean cooking solutions in these countries were 25 per cent, 28 per cent and 58 per cent respectively in 2021. In comparison, the worldwide average was 71 per cent.

78. Potentially, these countries could make considerable strides towards achieving Goal 7 by using their abundant natural energy resources. However, in comparison to other developing economies, they are falling behind global trends in the adoption of cutting-edge renewable technologies.

79. Installed renewable power generation capacity is growing in the least developed countries, landlocked developing countries and small island developing States, although more slowly than in other developing countries.

80. In terms of United States dollars, international public financial flows in support of clean energy fell for a fourth year in a row in 2021, down to \$10.8 billion after standing at \$26 billion in 2017. In 2021, the countries where support was needed the most received relatively little.

81. Energy intensity improved in small island developing States and landlocked developing countries while declining in the least developed countries. There was a huge drop in GDP and energy consumption in 2020, making it difficult to identify any particular trend in energy intensity, as the indicator was affected by factors unrelated to energy efficiency during the period in question.

IV. Follow-up to the high-level dialogue on energy and the United Nations Decade of Sustainable Energy for All (2014–2024)

82. In resolution 77/170, the General Assembly took note of the high-level dialogue on energy held on 24 September 2021 to promote the implementation of the energyrelated goals and targets of the 2030 Agenda for Sustainable Development in support of the implementation of the Decade and the voluntary commitments in the form of almost 200 energy compacts. The Assembly took note of the Secretary-General's proposed road map for accelerated action on Goal 7, as described in the report of the Secretary-General (A/77/211), and the high-level political forum on sustainable development.

83. In line with the Secretary-General's proposed road map for accelerated action on Goal 7, follow-up efforts have been accelerated around its five focus areas:

(a) Closing the energy access gap, to achieve access to clean energy for the over 675 million people who currently live without electricity and for the over 2.3 billion people still relying on harmful fuels for cooking, with a focus on vulnerable regions, countries and groups, while also emphasizing the importance of productive uses of energy for economic empowerment;

(b) Rapidly transitioning to decarbonized energy systems, through renewable energy and energy efficiency, to dramatically reduce greenhouse gas emissions,

advance climate action and strengthen energy security, while accelerating action to phase out coal power generation and fossil fuel subsidies globally;

(c) Mobilizing adequate and predictable finance, to triple global investment in renewable energy and energy efficiency, catalyse public and private finance and investment, increase finance and investment for developing countries and small island developing States;

(d) Leaving no one behind on the path to a net-zero future to ensure that the global energy transition is just, inclusive and equitable;

(e) Harnessing innovation, technology and data, including to promote technology transfer to developing countries.

84. Ongoing efforts, however, must be dramatically enhanced and intensified in order to accelerate the achievement of Goal 7.

85. As the secretariat of the high-level dialogue on energy, the Department of Economic and Social Affairs will continue to provide support for the follow-up to the high-level dialogue on energy, working closely with UN-Energy and other partners.

V. Review of Goal 7 at the high-level political forum

86. In 2023, the high-level political forum convened under the auspices of the Economic and Social Council conducted an in-depth review of Goal 7 for the first time since 2018.

87. In preparation of the review, a global expert group meeting was convened in New York on 11 and 12 May, gathering more than 70 experts from a wide variety of backgrounds and geographical regions.

88. The summary of the meeting included six key recommendations in support of the review of Goal 7, building on the follow-up to the high-level dialogue on energy and the Decade:

(a) Do what is needed immediately to provide everyone with access to electricity and clean cooking;

(b) Urgently accelerate just, inclusive and equitable energy transitions worldwide;

(c) Triple investment flows for clean energy;

(d) Boost the overall impacts of energy action by better capitalizing on the links between Goal 7 and other Goals, and across the various Goal 7 targets on energy access, efficiency and renewables;

(e) Invest in transformative partnerships that can rapidly expand progress towards Goal 7, such as the energy compacts;²

(f) Establish a permanent platform for intergovernmental dialogues on energy at the United Nations, with the effective engagement of business, civil society, young people and other stakeholders, noting that sustained, global dialogue on energy at the United Nations, including at the technical level, would be an important step towards strengthening inclusive and meaningful multilateral cooperation.

² See https://www.un.org/en/energycompacts.

VI. Scaling up action and implementing energy compacts

89. It is essential for efforts to be more ambitious if Goal 7 and net-zero emissions are to be. Realizing the global road map will bring us on track towards these objectives. All stakeholders must scale up their efforts and implement transformative action.

90. By mobilizing voluntary commitments from all stakeholders (including the private sector, young people and civil society, in addition to Member States) and by providing an effective tool for driving holistic and inclusive action, the energy compacts are a key vehicle by which to turn the global road map into concrete actions and partnerships.

91. Since their inception, the energy compacts have been instrumental in efforts to deliver concrete results on the ground. As reported in 2022, \$46 billion was invested towards energy compact commitments. Enhanced electricity access was provided to 6 million people and improved access to clean cooking for 14 million people. Furthermore, 88 GW of renewable energy capacity have been installed and 2,450 gigawatt-hours of energy have been saved through energy efficiency.

92. Moving forward, energy compacts must be further strengthened. The Energy Compact Action Network, which was launched on 4 May 2022, will be enhanced to mobilize further commitments, monitor progress on individual and multiparty compacts, identify drivers of success as well as opportunities for collaboration and support, and recognize gaps that require additional action from existing and new compact proponents. UN-Energy will continue to support the network.

93. The Sustainable Development Goals Summit represents a vital opportunity to change course, move from rhetoric to action and breakthrough to a better world. The United Nations development system will seek to rally all actors behind a set of high-impact initiatives to bring progress to scale between now and 2030. Energy compacts, as one of the 12 high-impact initiatives, will showcase ambitious commitments and progress from Member States and non-State actors in order to inspire increased action towards achieving Goal 7 and the energy transition in alignment with the Secretary-General's acceleration agenda and climate solidarity pact.

VII. Towards the global stocktaking of the implementation of Goal 7 at the completion of the Decade

94. The General Assembly, in its resolution 77/170, requested the President of the General Assembly to convene a global stocktaking, funded from extrabudgetary resources, to be held in 2024, marking the completion of the ongoing efforts to implement the plan of action of the Decade, and building on the follow-up to the high-level dialogue on energy, to further accelerate the implementation of Goal 7 of the 2030 Agenda.

95. The global stocktaking provides a unique opportunity to mobilize actions and solutions including means of implementation, share practical experiences and lessons, and further accelerate the implementation of Goal 7 in support of the 2030 Agenda and the Paris Agreement on climate change, building on the follow-up to the high-level dialogue on energy, including the global road map for accelerated action on Goal 7, the implementation of the plan of action of the Decade, the review of Goal 7 at the high-level political forum and learning from the implementation of the energy compacts. It will also provide an opportunity to discuss energy issues in view of the Summit of the Future.

96. Outcomes of the stocktaking should consist of a non-negotiated outcome document and voluntary commitments and actions by all stakeholders, including through energy compacts.

97. The global stocktaking can help to further accelerate implementation of the global road map for accelerated action on Goal 7 and the objectives of the Paris Agreement under the United Nations Framework Convention on Climate Change by addressing three key areas:

(a) Energy access: universal energy access to electricity and clean cooking solutions is a prerequisite and catalyst for improving the living and working conditions of all the world's people, especially the poorest and most vulnerable populations who presently lack any modern energy services; it is also integral to the transition to an inclusive, just, sustainable, secure and net-zero emissions energy system;

(b) Just, inclusive and equitable energy transitions: to further propel energy transitions based on renewable energy and energy efficiency, it is necessary to ensure that they leave no one behind, are aimed at enhancing human well-being, health and capabilities, increase resilience, empower women and young people, and drive innovation towards a sustainable society at all levels, while also driving large-scale investment. Such transition pathways will vary on the basis of the individual needs of countries and regions, including a variety of transitional measures;

(c) Means of implementation: to enable decisive action, it is essential to significantly strengthen the means of implementation, focusing in particular on catalysing finance and investment, especially for vulnerable regions, countries and groups. Efforts to drive innovation, creating a pipeline of projects, new technologies, capacity-building and quality data, is crucial for achieving Goal 7.

98. Preparations for the global stocktaking could include:

(a) Regional and thematic consultations including Member States and other stakeholders such as the private sector, civil society and academia;

(b) Elaboration of technical inputs including lessons learned, policy options and recommendations based on expert analysis; and

(c) Mobilization of all stakeholders towards Goal 7 and net-zero emissions so as to spur further action and partnerships, including through energy compacts, as well as other partnership arrangements.

99. As a follow-up to the high-level dialogue on energy, including the global road map for accelerated action on Goal 7, and building on the implementation of the plan of action of the Decade and the review of Goal 7 at the high-level political forum on sustainable development, Member States may wish to consider the establishment of an open-ended group of experts, composed of Member States, to inform the preparations for, deliberations at and follow-up to the global stocktaking. The group could serve to facilitate an exchange of knowledge and perspectives in a non-negotiated manner, with the aim of strengthening intergovernmental dialogues on energy, including, as observers, representatives of regional commissions and regional and international entities, as recommended by the expert group in a meeting in May 2023, to provide critical technical advice and support as needed. The Department of Economic and Social Affairs would serve as the secretariat of the expert group.

100. The Department of Economic and Social Affairs will continue to support the Secretary-General in coordinating the relevant activities in support of follow-up to

the high-level dialogue on energy, the implementation of the Decade and the global stocktaking in close collaboration with UN-Energy and other relevant stakeholders.

VIII. Strengthening coherence and coordination through UN-Energy

101. The General Assembly, through its resolution 77/170, encouraged UN-Energy to support coherence and coordination across the energy-related activities of the entities of the United Nations development system, within their respective mandates. Under the leadership of the UN-Energy Co-Chairs, the Administrator for the United Nations Development Programme, Achim Steiner, and the Special Representative of the Secretary-General for Sustainable Energy for All, Damilola Ogunbiyi, UN-Energy is working on bringing the United Nations system together for more integrated and coherent delivery of policy and normative support. The Department of Economic and Social Affairs provides the secretariat for UN-Energy.

102. In support of the global road map for accelerated action on Goal 7, UN-Energy is continuing to implement its plan of action towards 2025, including by:

(a) Accelerating action through the development of joint initiatives on electricity access and clean cooking, including in support of the empowerment of women and young people;

(b) Catalysing multi-stakeholder partnerships, including through the energy compact;

(c) Increasing momentum, for example by convening the first session of the EnergyNow SDG7 Action Forum on 23 September 2022;

(d) Informing the global agenda by providing policy analysis, including through a newly launched series of UN-Energy policy briefs; and

(e) Tracking and sharing results by reporting, a revamped digital platform and a series of outreach activities including UN-Energy webinars.

103. UN-Energy members will continue to collaborate towards the annual overview of progress towards Goal 7, entitled *Tracking SDG 7: The Energy Progress Report*, which is prepared jointly by the International Energy Agency, the International Renewable Energy Agency, the Statistics Division of the Department of Economic and Social Affairs, the World Bank Group and the World Health Organization, and contribute to the series of policy briefs compiled by the Technical Advisory Group.

104. UN-Energy will continue to strengthen capacity-building and sharing of lessons learned, including on specific interlinkages of Goal 7. Ongoing efforts include activities through the Health and Energy Platform of Action operated jointly by the World Health Organization, the Department of Economic and Social Affairs, the United Nations Development Programme and the World Bank; the Sustainable Water and Energy Solutions partnership created by the Department of Economic and Social Affairs and Itaipu Binacional; and the global conference on climate and Sustainable Development Goal synergies, jointly organized by the Department of Economic and Social Affairs and the secretariat of the United Nations Framework Convention on Climate Change.

105. UN-Energy will play a key role in the preparations for the 2024 global stocktaking, including in the coordination and preparation of consultations, as well as in the follow-up to the recommendations from the 2023 high-level political forum on its review of Goal 7 and from the Sustainable Development Goals Summit.

106. The UN-Energy secretariat at the Department for Economic and Social Affairs will continue to be strengthened to support the implementation of its plan of action in close cooperation with UN-Energy members and partners as well as the Development Coordination Office, as needed.

IX. Conclusion

107. The international community must step up and double down regarding action on Goal 7 in order to achieve the Goals and net-zero emissions. Accelerating just and equitable energy transitions is needed more than ever, as the current trajectory will result in failure. All stakeholders must urgently increase their efforts in support of Goal 7.

108. The momentum created by the high-level dialogue on energy and the implementation of the Decade of Sustainable Energy for All (2014–2024) needs to be built upon to spur further progress in line with the global road map for accelerated action on Goal 7.

109. The Sustainable Development Goals Summit, the global stocktaking of Goal 7 implementation and the Summit of the Future, provide a unique opportunities to galvanize political commitment and strengthen concerted action. In follow-up to the high-level dialogue on energy, including the global road map for accelerated action on Goal 7, and in building on the implementation of the plan of action for the Decade, and the review of Goal 7 at the 2023 high-level political forum, Member States may wish to consider the establishment of an open-ended group of experts, composed of Member States, to inform the preparations for, deliberations at and follow-up to the global stocktaking. The group could serve to facilitate an exchange of knowledge and perspectives in a non-negotiated manner, with the aim of strengthening intergovernmental dialogues on energy, including, as appropriate, a potential permanent intergovernmental platform on energy, as recommended by the expert group in a meeting in May 2023 and as discussed at the review of Goal 7 by the 2023 high-level political forum.

110. A permanent platform for intergovernmental dialogues on energy at the United Nations could serve as an important step towards providing regular support for strengthened, inclusive and meaningful multilateral cooperation. Such a platform could be informed by the outcomes of the 2024 global stocktaking in order to ensure the effective follow-up to the Decade and the high-level dialogue on energy convened in 2021.

111. UN-Energy will continue to strengthen coherence within the United Nations system on energy and step up support to Members States and other partners in line with its plan of action, and in support of the follow-up on the high-level dialogue on energy, the implementation of the Decade, the global stocktaking, other major global engagements such as the International Vienna Energy and Climate Forum, and relevant outcomes of the Africa Climate Summit, Climate Ambition Summit and the twenty-eighth session of the Conference of the Parties to the United Nations Framework Convention on Climate Change.

112. It is only through resolute action and international cooperation that sustainable and resilient societies can be built successfully, ensuring that no one is left behind, while bringing the objectives of both the 2030 Agenda and the Paris Agreement within reach.