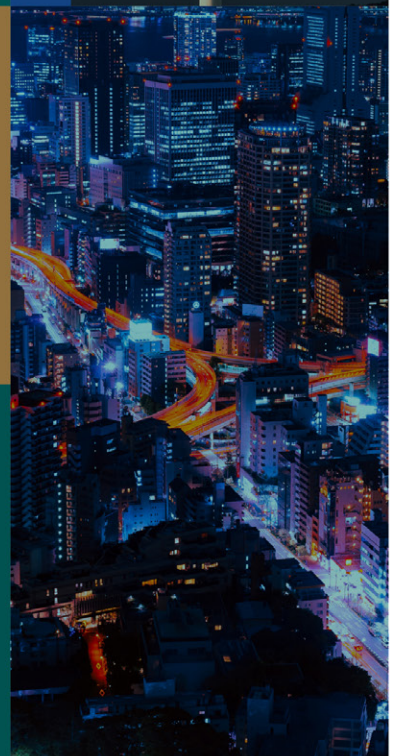
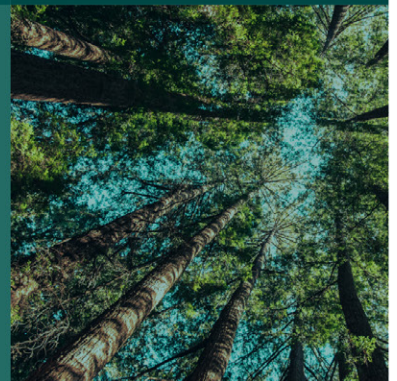


Building Alliances for the energy transition in the Atlantic

An Analysis from the Perspective of SDG 7

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ENERGY/
SUSTAINABILITY



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Abstract

The post-pandemic recovery is an opportunity to promote the energy transition processes that were already underway and have promoted new initiatives. The EU needs alliances with other actors to capitalise on the experience in the Atlantic Space and explore the dynamics and mutual interaction. This paper begins by analysing how SDG 7 has been implemented in three regions of Atlantic Space since 2015 and the main encountered in each. Next, the regional initiatives implemented to achieve the goals of SDG7 are analysed: universal and affordable access to energy, the increase in the percentage of renewable energies in the electrical matrix and the improvement of energy efficiency. Finally, the paper highlights opportunities for interregional cooperation on energy initiatives in the Atlantic area to contribute to achieving SDG7.

Keywords: energy transition, SDG7, regional cooperation, sustainability, renewable energies, Atlantic.

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1 Introduction

The Atlantic Basin is a key energy provider for the world's future in the energy transition and the green recovery after the COVID-19 crisis, thanks to several innovations in non-conventional and renewable energy. The post-pandemic recovery has been seen as an opportunity to promote the energy transition processes, which were already underway and have promoted new initiatives. The EU must establish alliances with other actors to capitalise on the experience in the Atlantic space and explore the dynamics for mutual interaction. Within this context, the Sustainable Development Goals (SDGs) and the 2015 Paris Agreement implementation process on climate change are the frameworks for analysing the trends and problems associated with climate change.

The escalation of the energy crisis, which caused generate electricity prices to skyrocket, has worsened due to Russia's aggression against Ukraine and the imposition of sanctions that have restricted the imports of Russian oil and gas into the EU. The [World Bank reports that](#) the energy crisis and inflation will worsen the declines in poverty indicators caused by the pandemic, possibly driving over 75 million people to fall into extreme poverty by 2023. According to the Energy Progress Report that follows up on SDG 7, edited by the World Bank in 2022, the pandemic has been a determining factor for going backwards in the level of compliance with the goals of [SDG 7](#) (IBRD, 2022). Africa remains the least electrified continent, but there is also a lack of access at an affordable price in other Atlantic regions. In addition to access, the green transition will require large investments to ensure that universal access is sustainable. This paper will start with the current state of SDG 7 compliance in the Atlantic area before analysing the specific challenges facing each region. Next, an analysis will be conducted on the regional measures and proposals launched to respond to the energy transition and how they relate to the goals of SDG 7 and the commitments of the Paris Agreement. Finally, opportunities for EU interregional cooperation within the Green Deal framework and the Repower-EU Plan will be assessed.

2

The SDG7 and regional dynamics in the Atlantic basin

The SDG 7 of the 2030 Agenda establishes the objective of guaranteeing access to affordable, reliable, sustainable and modern energy for all within a 15-year horizon. This objective is subdivided into three main goals:

- 7.1 Guarantee universal access to affordable, reliable and modern energy services.
- 7.2 Significantly increase the share of renewable energy in the mix of energy sources.
- 7.3 Double the global rate of energy efficiency improvement.

As accompanying actions, SDG 7 proposes:

7a. Increase international cooperation to facilitate access to clean energy research and technology, including renewable sources, energy efficiency, and advanced and cleaner fossil fuel technologies, and promote investment in energy infrastructure and clean technologies.

7b. Expand infrastructure and improve technology to provide modern and sustainable energy services for all in developing countries, particularly least developed countries, small island developing States and landlocked developing countries.

Halfway through the 2030 Agenda, the balance of the goals achieved offers this chiaroscuro. At the global level, according to the “Energy Progress Report 2022” (IBRD, 2022), based on the most recent data available, there were 733 million people without access to electricity, a considerably lower figure than the 1,200 million who lacked it in 2010. However, the rate of growth of the ratio has slowed in recent years, and large inequalities persist; 77% of the offline people are in sub-Saharan Africa and are concentrated in rural areas. 15 of the 20 countries with the highest proportion of the population without access to electricity are in Africa (IBRD, 2022). In addition, the increase in energy prices after the invasion of Ukraine has rendered it unaffordable for the most disadvantaged population, despite having a opportunity to connect to the grid, particularly in Africa and Asia, but also for the humblest homes in America and Europe (IEA 2021).

More significant investment in renewable energy is necessary to ensure sustainable and affordable universal access. During this period, the ratio of renewable energies to total consumption increased from 16.1% to 17.7%, which shows the difficulties in advancing (IBRD, 2022). Sub-Saharan Africa has a high percentage of renewable energy, mainly due to traditional, low-efficiency biomass use. Latin America also has a high percentage due to hydroelectric plants and bioenergy in industrial processes. In Europe, the increase in the percentage of renewables has been produced, above all, by the increase in bioenergy, but wind power has also grown considerably. The 2022 Report warns of a shortfall in public financing for clean energy projects in developing countries, with a decline during the pandemic years of 2018 and 2019 (IBRD, 2022). Hydroelectric plants still receive the most prominent investment, but there is a notable increase in solar power and a smaller but growing investment in wind power. Investment decreased in developing countries, with the most significant decline occurring in Latin America. Sub-Saharan Africa also saw a decline, but it was not as significant. Despite the investment slowdown, most new power generation capacities are currently directed at renewables and innovation development for more efficient use in different industries and transport sectors (IRENA b, 2019). Investment in renewables has generated new quality jobs and the development of new productive sectors. However, new investments are highly concentrated in Europe, the United States and China, so there is a risk of increasing the technological development gap. Another substantial concern is these new technologies' demand for minerals and rare earth elements, primarily found in developing countries. There is also a concern that the extractive production model will deepen in resource-rich developing countries instead of contributing to developing the most innovative, productive sectors. For this reason, progress in the energy transition process must incorporate the objectives of inclusive and affordable access for the entire population and technology transfer.

Trends in Africa

Africa is the continent with the most energy access deficits and, at the same time, with the greatest increase in demand due to population growth, industry and accelerated urbanisation (Cozzi, 2022). Between 2014 and 2019, the number of Africans without electricity decreased, but with the pandemic, the trend reversed as investment in connections slowed while the population continued to rise. As a result, in 2021, the lack of electricity increased by 4% compared to 2019 (IBRD, 2022). As in other regions, in Africa, many countries adopted policies to protect the most vulnerable citizens from the economic crisis related to COVID-19, but the scope was limited by its limited fiscal space.

Access to electricity in North Africa is estimated to be the highest on the continent, estimated at 90.7%, although the share of the rural population is slightly lower (88%). In 2021, the pandemic led to a slight 0.2% decline in electricity access. Even so, the 2030 electricity access target could still be reached in this region with a concerted effort

supported by international cooperation. Major policy efforts should address the rural-urban divide. (RSA, 2022)

In 2021, Central Africa had the lowest percentage of the population with electricity among the African subregions, an estimated figure of approximately 28.7%. The disparity between urban and rural access to electricity is also the largest across the continent, with rural areas having 7.8% access to electricity in 2021 and urban areas having 53%. The region requires proactive policies and international cooperation in order to guarantee the supply of electricity. Access to electricity in southern Africa also remains a challenge. Only 52% of the population had access to electricity in 2020 and 2021. According to (RSA 2022), without concerted efforts under the COVID reference scenario, only 57.7% of the population would have access to electricity by 2030 and 77.7% by 2050. In West Africa, only 53% of the population had access to electricity in 2021. The pandemic had a slight effect on this trend. Achieving universal access to affordable electricity in sub-Saharan Africa by 2030 requires bringing connections to 90 million people a year, triple the rate of recent years (Cozzi. 2023)

In addition to the challenge of electricity access, the issue of quality is also significant in Africa is quality; only 17% of the population has access to clean energy for cooking. Sub-Saharan Africa is the only region in which the number of people without access to clean fuels and technologies is rising. Since 1990, the access deficit in this region has nearly doubled, increasing more than 50% in 2000, reaching 923 million (898–946) people in 2020 (IBRD, 2022). More than 93% of the rural population in Sub-Saharan Africa lacks access to clean cooking fuels and technologies, compared to 71% of the urban areas. Liquefied petroleum gas (LPG) is the leading solution in urban areas. However, recent price spikes have made it unaffordable for 30 million people across Africa, pushing many to revert to the traditional use of biomass (IBRD, 2022). Countries are re-evaluating clean fuel subsidy schemes and exploring alternatives, such as improved biomass cook stoves, electric cooking and biodigesters. The lack of access to clean energy negatively impacts health and quality of life, primarily affecting women and children.

Sub-Saharan Africa has the largest share of renewable energy supply, but that is because of the widespread of traditional biomass uses for heating and cooking. In Africa, the use of traditional biomass constitutes 85% of renewables. They are very inefficient sources and release a large percentage of gases contributing to climate change. In the last ten years, sub-Saharan Africa's power capacity per capita has grown by 4.5%, but it still represents a meagre percentage of total electricity consumption (IBRD, 2022). The lack of financing is a key reason preventing solar projects from having not rolled out faster¹. In North Africa, natural gas is expected to play the most significant, accounting for 45% of the total mix. Solar will make up 9%, while wind will comprise 7%. However, renewables will be more prominent in sub-Saharan Africa, with solar making up 12%. Natural gas will still comprise 26%. (Silverstein, 2019). Nevertheless, there are many gaps in Africa's transport and storage infrastructures.

1. <https://acetforafrica.org/news-and-media/acet-in-the-news/solar-energy-could-light-up-africa-and-global-businesses-see-opportunity/>

Africa has the world's lowest per capita use of modern energy. As its population and incomes grow, the demand for modern energy expands. However, the current price spikes risk doubling energy subsidy burdens in African countries in 2022, an untenable outcome for many states facing debt distress (IBRD, 2022). Some countries, including Egypt, Ethiopia and Uganda, are being driven to halt or reduce subsidies. Africa's vast resources of minerals that are critical for multiple clean energy technologies are set to create new export markets but need to be well managed. Africa has huge potential to produce hydrogen using its rich renewable resources but does not have the electricity infrastructure to ease distribution².

However, a growing number of low-carbon hydrogen projects are underway or under discussion in Egypt, Mauritania, Morocco, Namibia and South Africa. These initiatives focus primarily on using renewables-based power to produce ammonia for fertiliser, strengthening Africa's food security (Cozzi, 2023). Global declines in the cost of hydrogen production could allow Africa to deliver renewables-produced hydrogen to Northern Europe at internationally competitive price points by 2030. With further cost declines, Africa has the potential to produce 5 000 megatonnes of hydrogen per year at less than USD 2 per kilogramme – equivalent to the global total energy supply today (IEA, 2023). In sum, Africa confronts significant shortages to reach SDG 7 goals but also has high opportunities to develop clean and sustainable energy sources that require innovation and infrastructure investments.

Trends in Latin America and the Caribbean

In Latin America, the gaps in access to electrical services have been narrowing thanks to the implementation of policies, plans, and programmes that have allowed coverage to increase faster than the rate of population growth, accounting for an excellent performance of energy institutions in the region. The region has steadily expanded its coverage, bringing the deficit from 10.96% in 2000 to 2.85% in 2018; that is, before the pandemic, for 18 years, the deficit has been reduced from 56.4 to 18.1 million people. Access at the urban level shows a deficit of around 0.52%, indicating that universalisation by 2030 is highly probable. In contrast, rural areas experienced a deficit of 11.31% in 2019 (Cozzi, 2023).

South America has made the most advancement, reaching a coverage rate of more than 98%, while the Caribbean has a coverage rate slightly below 81%. Central America ranks as the second subregion in terms of access deficit, presenting a proportion of 7.9% of the population without access, which means that around 3.9 million of its inhabitants do not have energy services (Contreras and Salgado, 2021). Observing how the gaps between the population without access and those with access have been narrowed, the subregion has performed very well. If this trend is maintained, universalising access can be achieved by 2030.

2. <https://www.en-former.com/en/north-africas-hydrogen>

The coverage deficit in difficult-to-access LAC could be reduced thanks to the incorporation of renewable energies, which have contributed effectively and efficiently to the electrification of rural areas. A significant issue is that to support the positive trends in rural areas, initiatives to incorporate renewable energy must continue. Such renewable energies do not require networks powered by centralised generation sources, allowing the use of local energy resources. However, some countries are still far from reaching the goal of universal access at affordable prices. According to the IEA, 21.5% of the region's population may not consume safe food because of a lack of access to modern and healthy cooking and refrigeration technologies, equivalent to around 140 million people (IEA, 2021). This constitutes a public health problem and poses a high risk to people's lives since the existence of Foodborne Diseases (ETA) increases.

Regarding the energy matrix, if traditional biomass is excluded, Latin America has the highest percentage of renewables, thanks to hydroelectric projects and ethanol for industrial use and fuel for transportation. In the region, Brazil is the country with the highest percentage of renewable energy. In 2019, hydroelectric electricity accounted for 44% of the total energy produced. According to the data compiled by OLADE's sieLAC, the region had an installed renewable energy capacity of 261.2 GW in 2019. Since 2014, expansion rates have increased significantly, with more than 5% annual increases. Data from sieLAC-OLADE show that the installed capacity in renewable energies increased between 2010 and 2019 from 13.8 GW to 27.0 GW in the Caribbean, from 5.8 GW to 11.8 GW in Central America and from 146.3 GW to 22.0 GW in South America. These indicators reflect a significant increase in installed capacity with the participation of wind, solar, geothermal, hydroelectric and bioenergy energy (Castillo, 2022).

In Latin America, power capacity per capita grew by 4.1% and diversified with the addition of solar and wind power. Despite having the highest energy intensity indices in the world, Latin America and the Caribbean have the lowest annualised improvement rates: 0.45%. Between 1990 and 2015, the energy intensity decreased from 98.82 in 1990 to 86.22 in 2019 (kgep / Thousand USD 2011 PPP) (IBRD, 2022). The improvement in energy efficiency is due to replacing more efficient sources such as gas. However, electrification has also improved efficiency rates since it allows using more efficient and modern energy sources in residential tasks and industrial sectors. The industry has contributed substantially to reducing energy intensity due to the energy efficiency plans imposed by some governments that proved to be successful.

According to the data, the SDG 7.3 indicator (doubling the rate of improvement in energy efficiency concerning the indicators of 2015) could be met in Latin America only by accelerating the rates of reduction in energy intensity (IBRD, 2022). Referring to the behaviour of energy intensity in the sub-regions of Central America and the Caribbean, it has been observed that the indicator presents a decreasing trend in both cases, which means that the regions have improved their energy efficiency. The trend is repeated in South America, although to a lesser extent. In general terms, Latin America starts from a favourable situation regarding the renewable energy matrix. However, it

faces many shortcomings in infrastructure and marked differences between the rural and urban areas.

Trends in Europe

In Europe, the possibilities of connection to the electricity grid are much more guaranteed, but it is not always affordable, and this has worsened as prices have risen. According to Eurostat, 8% of the EU population reported in 2020 that they could not heat their home adequately³, 1% higher than in 2019⁴. Approximately one-fifth of the EU's poorest population experienced energy poverty that year. The situation varied across the EU Member States, with the largest share of individuals unable to adequately heat their homes in Bulgaria (27%), followed by Lithuania (23%), Cyprus (21%), Portugal and Greece (17%).

Regarding the energy matrix, the EU is still highly dependent on fossil fuels for its energy. Reducing total energy consumption and using renewable energy while guaranteeing the security of supply, competitiveness, and access to affordable energy for all its citizens are the EU's challenges for achieving SDG 7. Since 2005, the use of renewable energy has grown continuously in the EU, with its share doubling when renewable energy covered only 10.2% of gross final energy consumption. By 2021, this figure had reached 22%⁵. More than 80% of the growth of renewables in Europe corresponded to solar and wind energy. Reduced investment costs, more efficient technologies, supply chain improvements, and support schemes for renewable energy sources have fuelled this increase. In addition, the EU appears to be on track to meet the 32% target by 2030. However, the measures taken against the COVID-19 pandemic reduced final energy consumption in 2020, increasing the share of renewable energy in final consumption power raw by 11.1% from 2019 to 2020 (from 19.9% in 2019 to 22.1% in 2020)⁶. This rapid increase is exceptional and could be partially reversed, with final energy consumption partially returning to pre-pandemic time.

Despite the continued growth of renewable energy sources over the past decade, fuel imports from non-EU countries remained a major source of meeting the EU's energy needs, contributing 57.5% of the gross energy available in 2020. This is almost the same proportion as in 2005 when imports covered 57.8%. Two opposite developments can explain this stagnation. On the one hand, the EU reduced its energy consumption and increased the use of domestic renewables. On the other hand, the EU experienced a reduction in the primary production of fossil fuels due to the depletion or lack of profitability of domestic sources, particularly natural gas. Therefore, in 2020, net imports were highest for petroleum and petroleum products (97.0% imported), followed by natural gas (83.6% imported) and solid fuels (predominantly coal) (35.9% imported).

3. <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20211105-1>

4. <https://ec.europa.eu/eurostat/web/products-eurostat-news/w/DDN-20230515-1>

5. <https://ec.europa.eu/eurostat/web/products-eurostat-news/w/DDN-20230515-1m>^h<https://www.eea.europa.eu/ims/share-of-energy-consumption-from>

6. [Share of energy consumption from renewable sources in Europe \(8th EAP\) \(europa.eu\)](#)

Net imports of renewable energy, including biofuels, represented 8.5% of the gross renewable energy available in 2020 and only 1.7% of total net imports (IBRD, 2022).

The monitoring of SDG 7 shows that energy consumption efficacy has improved. Household energy consumption appears to have stagnated over the last five years. In 2020, average household energy consumption was 555 kilograms of oil equivalent (kgoe) per EU inhabitant, just 0.5% more than in 2015. In response to the COVID-19 pandemic, including restrictions on public life and lower economic activity, measures significantly reduced consumption in 2020, allowing the EU to reach its 2020 target (IBRD, 2022). However, extra efforts should be made in the recovery scenario.

3 Regional Initiatives for Energy Transformation to Face Climate Change

The “Global Roadmap for accelerated SDG 7 Action in Support of the 2030 Agenda for Sustainable Development and the Paris Agreement on Climate Change”⁷ was approved at the High-Level Energy Dialogue organised by the Secretary-General of the United Nations in September 2021. It urged immediate action to guarantee the achievement of SDG 7’s goal. This included closing the energy gap access, rapidly transitioning to decarbonised energy systems, mobilising adequate and predictable financing, leaving no one behind on the path to a net zero future, and harnessing technology and data. Based on the previous UN background reports⁸, the document also established two lists of milestones, one with a 2025 horizon and the other with a 2030 horizon. The roadmap appealed to strengthening transformational partnerships to translate the global plan into concrete actions to achieve these objectives. The Dialogue also triggered some 200 multi-stakeholder Energy Compacts⁹ with voluntary commitments to direct investment, know-how and resources to help achieve the commitments, including governments, the private sector, cities or civil society.

However, monitoring SDG7 indicator 7.a of the Energy Progress Report 2022 shows that public financial flows supporting clean energy in developing countries were declining even before the COVID-19 pandemic. In 2019, they amounted to USD 10.9 billion, a drop of 23% compared to 2018. International public financial flows decreased in all renewables for the second consecutive year. In 2019, hydropower attracted 26% of commitments, followed by a solar power at 21%, wind power at 12%, geothermal at 3%, and other renewables (IBRD, 2022).

That same report notes that, although there is no quantitative target as an indicator for SDG 7.a, the decline in cooperation shows that the level of commitment is still far below what is needed to achieve SDG 7, particularly for least developed countries, landlocked developing countries and small island developing countries. After the pandemic, recovery challenges are even more significant and developing countries have very little fiscal space if not unaffordable debt. Efforts to recover the economy must contribute to the energy transition.

The Energy Progress Report also shows that all Atlantic Developing regions declined in international public flows in 2019. Comparatively, the declines were less significant

7. https://www.un.org/sites/un2.un.org/files/2021/11/hlde_outcome_-_sdg7_global_roadmap.pdf

8. <https://www.un.org/en/conferences/energy2021/RESOURCES>

9. <https://www.un.org/en/energycompacts>

in sub-Saharan Africa, which dropped just 1.7% to USD 4.0 billion. In North Africa, flows decreased by 22.3% to USD 1.8 billion; in Latin America and the Caribbean, the drop was 29.8%. The bulk of financing should come mainly from the private sector, which funded an average of 85% of new renewable energy projects from private investors between 2013 and 2018 (IBRD, 2022). However, financial institutions and international donors have a very catalytic role, especially in high-risk developing countries. Coordination between different sources is essential for aligning policies with objectives to achieve the SDG7 targets and create an enabling environment for private investment.

Regional initiatives have been developed that seek to strengthen action in favour of the energy transition through regional cooperation. Before the COVID-19 crisis and the rise in energy prices after the war in Ukraine, plans were launched to address the climate change-related energy transition. The energy crisis has resulted in the need to implement short-term measures that may conflict with the medium-term objectives to respond to supply needs. However, high energy prices are also an incentive to invest in innovation and energy efficiency (EUI, 2022) everywhere, especially in the EU, which highly depends on imported energy.

This section analyses the initiatives underway in three Atlantic regions to contribute to achieving the objectives of SDG 7 to see if they offer opportunities to strengthen alliances and interregional cooperation. Only those ongoing projects related to the SDG 7 goals and with a multilateral scope that have a regional perspective have been highlighted. Projects with a national focus are not considered, nor are international projects that do not have a regional perspective, since the objective is to analyse the prospects for interregional cooperation between the three regions. Non-governmental initiatives are not included either, although, in some cases, they are mentioned when they collaborate with public initiatives.

Regional initiatives in Africa

Regional initiatives in Africa take place both at the continental level, mainly with the support of the African Union (AU), and at the regional level, within the Regional Economic Communities (REC)¹⁰. At the continental level, African countries actively participate in international climate change negotiations and coordinate their participation through the [African Group of Negotiations on Climate Change](#) (AGN), created in 1995. AGN has helped develop the African Renewable Energy Initiative (AREI) and the African Adaptation Initiative.

The [AREI](#) encourages the deployment of renewable electricity to accelerate Africa's renewable energy potential. It was endorsed by the Committee of African Heads of State and Government on Climate Change (CAHOSCC) and fell under the mandate of

10. The Regional Economic Communities (RECs) are regional groupings of African states designed to facilitate regional economic integration between members of the individual regions. Among the eight recognised to stand out are the East African Community (EAC), the Economic Community of Central African States (ECCAS), the Economic Community of West African States (ECOWAS), and the Southern African Development Community (SADC).

the AU. The main goals are aligned with SDG 7: 1) ensuring universal access to sufficient amounts of clean, appropriate, and affordable energy; 2) helping African countries leapfrog to renewable energy systems that support their low-carbon development strategies. It is currently in its second phase, which began in 2015 (2020-2030). Core work Areas are (1) mapping of experiences and activities for enhanced coordination of existing and future initiatives; (2) strengthening regulatory and policy frameworks to enable investments in renewable energy generation in Africa; (3) building capacity mobilisation and fostering partnership across stakeholders at all levels; (4) adequating public and private funding; (5) projecting development and support through AREI Trustee Fund or other channels; (6) conducting socio-economic and environmental assessments of renewable energy technologies; (7) engaging in multi-stakeholder; (8) monitoring and assessment observatory.

The initiative interacts with the renewable energy components of other existing initiatives such as the [Program for Infrastructure Development for Africa \(PIDA\)](#), Power Africa, the Africa-EU Energy Partnership, the Africa Clean Energy Corridor of the International Renewable Energy Agency (IRENA) and numerous bilateral, civil society and community efforts that have emerged to address Africa's energy challenges. The aim is to boost international cooperation and promote and support those activities and projects mutually accepted by participating countries. France and the EU are standing observers.

In June 2021, the AU launched an initiative for the [African Single Electricity Market \(AfSEM\)](#), which can become the world's largest single electricity market with 55 members. AfSEM aims to be operational by 2040 and will be supported by a Continental Power System Masterplan. This initiative's goal, supported by the Africa-EU Energy Partnership (AEEP), is to harmonise regulatory frameworks and integrate generation, transmission and distribution masterplans to improve access to reliable and sustainable energy. AfSEM includes the Strategy for the Harmonization of Regulatory Frameworks for the Electricity Market in Africa.

The AU also hosts the [Geothermal Risk Mitigation Facility for Eastern Africa](#)¹¹ established in 2012 to accelerate the geothermal development in Eastern Africa in twelve partner countries in the Eastern African Rift region. The objective is to encourage public and private sector investment in geothermal power generation.

The [Sustainable Energy Fund for Africa](#) (SEFA) is a multi-donor Special Fund established in 2011 and managed by the African Development Bank (ADB). It provides catalytic finance to unlock private sector investments in renewable energy and energy efficiency. SEFA has helped prepare two initiatives: the [Africa Renewable Energy Fund](#) (AREF) and the [Facility for Energy Inclusion](#) (FEI). The [Africa Renewable Energy Fund](#) (AREF) focuses on developing clean energy assets across Sub-Saharan Africa, such as run-of-river hydropower, wind and solar projects, and battery storage opportunities. The [Facility](#)

11. <https://grmf-eastafrika.org>

[for Energy Inclusion](#) (FEI), on the other hand, supports small-scale independent power producers, mini-grids, on-site commercial and industrial, and captive power projects.

The [African Clean Energy Corridor](#) (ACEC) is a regional initiative to accelerate the development of renewable energy potential and cross-border trade of renewable power within the Eastern Africa Power Pool (EAPP) and Southern African Power Pool (SAPP). The ACEC is based on five pillars established in the communiqué, endorsed during the Fourth Assembly of the International Renewable Energy Agency (IRENA) in January 2014: (1) [Zoning and Resource Assessment](#) to site renewable power plants in areas with high resource potential and suitable transmission routes; (2) [Long-Term Energy Planning Support](#) to African countries, through [regional training workshops](#) and power pool assessments and [national capacity building programmes](#). (3) Enabling Frameworks for Investment to open markets and reduce financing costs; (4) Capacity Building to plan, operate, maintain and oversee power grids and markets with higher shares of renewable power generation; (5) Public Information and Awareness to raise awareness of how large-scale renewable power generation can provide secure, sustainable and affordable energy.

The United Nations Economic Commission for Africa (ECA) launched in 2020 the “[GSDG 7 Initiative for Africa](#)” to mobilise resources for investments, particularly from the private sector. This initiative brings together countries, financiers, and developers of clean-energy projects to align their interests and combine scale and speed to fast-track financing for deploying clean-energy projects in Africa.

Besides this battery of continental initiatives, there are the regional initiatives of the RECs. Some are interconnected with continental and other global initiatives. The [Western African Power Pool](#) (WAPP), created in 1999 by the Economic Community of West African States (ECOWAS), is an association of public and private power entities to improve the reliability of energy provision and reduce distribution costs. In 2018, an initiative to negotiate bilateral contracts for the supply of electricity was launched. WAPP has already improved reliability thanks to the pooling of resource generation, especially hydroelectric plants, whose output varies by season and country. WAPP plans to build interconnections with North Africa via Morocco and the Central African Power Pool, where a major hydroelectric project is planned in the Democratic Republic of Congo.

The [ECOWAS Regional Centre for Renewable Energy and Energy Efficiency](#) (ECREEE), created in 2008, is assisting the fifteen ECOWAS Member States in the development, adoption and implementation of national renewable energy and energy efficiency policies and targets, regulatory frameworks, standards, as well as incentives and financial mechanisms. The aim is to promote the provision of efficient, reliable and competitive energy sources to Member States and assure rural access to affordable energy in the region. The Centre developed the [ECOWAS Renewable Energy Policy \(EREP\)](#) and the [ECOWAS Energy Efficiency Policy \(EEEP\)](#), adopted during the ECOWAS

High Level Energy Forum held in October 2012. ECREEE facilitates and monitors regional policies' implementation, including an obligation for the countries to propose national action plans and measures that respond to the set regional targets by 2030. The Strategic Plan 2023-2027 was established as the main objective to facilitate universal access to reliable and affordable modern energy in the ECOWAS Member States.

The East Africa Community (EAC) adopted in 2005 the [Regional Strategy on Scaling-Up Access to Modern Energy Services](#) with aims to increase access to modern energy services by adopting High Impact, Low-Cost scalable approaches. It addresses four key targets essential to reduce poverty and promote sustainable development in line with SDG7: (1) Access to modern cooking practises for 50% of traditional biomass users; (2) Access to reliable electricity for all urban and peri-urban poor; (3) Access to modern energy services for all schools, clinics, hospitals and community centres; (4) Access to mechanical power within the community for all production services.

The EAC also created the East African Centre of Excellence for Renewable Energy and Energy Efficiency ([EACREEE](#)), an initiative supported by the United Nations Industrial Development Organisation (UNIDO). EACREEE aims to facilitate the creation of an enabling environment for renewable energy and energy efficiency markets to contribute to (1) increased access to modern, affordable and reliable energy services, (2) energy security and (3) mitigation of negative effects. According to the objectives of the UN Sustainable Energy for All Initiative (SE4ALL) and the SDGs, the initiative aims at the achievement of three interlinked targets by 2030: (a) ensuring universal access to modern, affordable and reliable energy services, (b) doubling the rate of improvement in energy efficiency, (c) doubling the share of renewable energy in the global energy mix. The centre also operates as a key entry point for implementing international funding to mitigate climate change in the energy sector.

By promoting renewable energies and energy-efficient technologies and services, the [Southern African Development Community Centre for Renewable Energy](#) (SACREEE) was established in 2015 by the SADC Council of Ministers to increase access to modern energy services and improve energy security. SACREEE focuses on programmes and projects that can best be implemented at the regional level, including harmonisation of policy approaches, regulation and standards, investment coordination, and regional capacity-building and knowledge-building measures. In addition, the centre also acts as a partner of the South-South Cooperation Network with the other centres in West and Eastern Africa, as a focal point for the implementation of the Sustainable Energy for All (SEforALL) Initiative in SADC and as an organisation that facilitates access to finance in renewable energies.

The ECCAS created the [Centre for Renewable Energy and Energy Efficiency for Central Africa](#) (CEREEAC), inaugurated in March 2023 with the support of the Global Network of Regional Sustainable Energy Centres (GN-SEC) programme, which is coordinated by the United Nations Industrial Development Organization (UNIDO). The CEREEAC

operates through a network of National Focal Institutions (NFIs) and Thematic Hubs (THs) among all ECCAS countries and has the aim to address demand and supply-side barriers for integrated and inclusive ECCAS sustainable energy products and service markets by promoting economies of scale, equal progress, joint learning and spill-over effects between countries. Among the remarkable achievements that should be highlighted are the ECCAS Green Economy and Renewable Energy Vision, the ECCAS Vision 2025, and the CEMAC White Paper and Energy Policy 2035.

With the creation of the CEREEAC, the GN-SEC will cover the entire African continent and serve as an important triangular capacity for accelerating the implementation of the industrialisation, energy and climate goals in the African Union Agenda 2063, “The Africa We Want”. It contributes to the AU’s efforts to establish a harmonised continental electricity market and free trade area and implement the Third Industrial Development Decade for Africa (2016–2025). UNIDO will facilitate South-South and triangular cooperation on common energy issues and solutions between CEREEAC and the other African centres, including RCREEE (Egypt), ECREEE (Cape Verde), SACREEE (Namibia) and EACREEE (Kampala).

Latin America and Caribbean regional initiatives

In LAC, there are initiatives for the whole region and, on a sub-regional scale, with several interactions. On a regional level, most initiatives aim to strengthen capacities to generate information and strengthen planning capacities to develop policies appropriate to the objectives of energy issues.

The main organisation for regional cooperation on energy is the [Latin American Energy Organization](#) (OLADE), created in 1973 through the Lima Agreement to contribute to integrating sustainable development and energy security in the region. The organisation has developed some projects to promote regional energy cooperation. Regarding SDG 7, the [Latin American and Caribbean Energy Information System](#) (sieLAC) should be highlighted. It is a regional energy platform that integrates and processes the statistical, legal and documentary information of the 27 OLADE Member Countries based on standardised methodologies that allow the comparison of the energy sector at the national, subregional and regional levels. It provides an important source of information and is a reference point for different decision-makers in the public and private sectors, academia, investors, international agencies and consultants. The SieLAC data permits the measurements of SDG7 progress to make predictions for its future evolution. They also prepare the “[Energy Panorama of Latin America and the Caribbean](#)” periodical document.

The United Nations [Economic Commission for Latin America and the Caribbean](#) (ECLAC) has also developed initiatives for [energy cooperation](#) related to SDG 7, which can be highlighted as follows.

The [Regional Forum of Energy Planners](#) (FOREPLEN), started in 2018, is a permanent cooperation forum that brings together the teams and entities involved in energy planning in Latin America to generate a long-term vision of the knowledge that leads to system planning of sustainable, safe and affordable energy sources, pointing to complementarity in the framework of an energy transition in the region. This project is supported by [GET.transfor](#) (see below), which is part of the Global Energy Transformation Program (GET.pro), a European multi-donor platform to achieve international energy and climate goals.

The [Regional Observatory on Sustainable Energies](#) (ROSE) is an initiative that seeks to integrate different already existing initiatives to join efforts to fulfil the goals of the 2030 Agenda with special attention to SDG 7. Within the framework of the ROSE, regional statistical sources and a more specific national-level one have been implemented and are available on the ECLAC statistics portal. The project has strengthened the countries' capacities by defining and analysing energy indicators that cover the three dimensions of SDG 7: universal access to energy, promotion of renewable energies and duplication of the impact of energy efficiency.

The Inter-American Development Bank (IDB), together with ECLAC, OLADE, IRENA, the Ibero-American Association of Energy Regulatory Entities (ARIAE), and the Sustainable Energy for All Program created the [Hub platform of Energy Latin America and the Caribbean in 2020](#) to share information on the electricity sector in the region. This Hub includes initiatives such as the [Observatory of Energy Management Systems in Latin America and the Caribbean](#) (OSGELAC) or [Electrorating](#), which collects information from energy distribution companies.

Another initiative in the Hub is the [Renewables Initiative in Latin America and the Caribbean](#) (RELAC), created in 2019 during the United Nations Climate Action Summit. It is an initiative to accelerate decarbonisation through the promotion of sustainable sources to reach the goal of 70% renewables in 2030, to which 16 different countries of the region initially adhered. The technique secretary is held by the IDB and is monitored by OLADE. The network seeks to identify investment and technical assistance needs, disseminate good practises, and propose regulatory models and finance schemes with different agencies.

At the subregional level, initiatives to develop connection infrastructures between the region's countries prevail and also contribute to improving access and efficiency.

The Central American Integration System (SICA) has developed various energy-related initiatives. In 1996, the SICA countries signed the Central American Electricity Market Framework Treaty, establishing the necessary regional legal framework for creating the Regional Electricity Market (MER). The first step was the creation of the [Electrical Interconnection System for Central American Countries](#) (SIEPAC) to develop regional electric integration in Central America. The project has three main areas: (1) the integration of the six national electrical systems, creating a single energy market; (2)

the reduction of greenhouse gas emissions; (3) the integration of the communications systems of Central America, Mexico, Colombia and submarine cables.

In July 2006, it was agreed to create the SICA Energy Coordination Unit in the General Secretariat. This unit developed various initiatives, among which the most remarkable are (1) the approval in 2020 of the [Sustainable Energy Strategy 2030 of the SICA countries](#) (EESCA 2030), the successor to the previous 2020 strategy, (2) the approval, in 2018, of the first four regional energy efficiency standards and, (3) the creation of the Regional Energy Center in 2018. The EES-SICA 2030 is aligned with SDG 7 and linked to the remaining social, economic and environmental objectives of the 2030 Agenda. Based on the diagnosis of the state of compliance with SDG 7, a roadmap was designed with specific goals to enlarge universal access, increase renewable energies and improve energy efficiency. The SICA Energy Coordination Unit (UCE-SICA) also establishes a monitoring system. In 2020, SICA approved an energy sector plan to face the COVID-19 crisis with specific actions to avoid shortages.

In 2018, SICA and UNIDO signed an agreement to establish the [Regional Centre for Renewable Energy and Energy Efficiency of the SICA countries](#) (SICREEE). The aim was to expand renewable energies and implement industrial, commerce, services or residential projects to contribute to the implementation of the EES-SICA 2030. This Regional Centre is concerned with (1) executing renewable energy and energy efficiency activities at a national, multi-country and/or regional level; (2) undertaking activities and projects with a high potential to expand its coverage and allow its regional replication; and (3) focusing on urban and rural areas, emphasising decentralised RE&EE technologies and services for rural areas related to the agricultural sector.

The regional cooperation has been expanded to neighbouring countries within the Mesoamerica Plan (MP), created in 2008 to replace the previous Puebla-Panama Plan. In the [Energy pillar](#), the PM intends to increase energy access and lower costs by promoting a regional market and the use of clean energy. It comprises four pillars: electrical interconnection, rational and efficient energy use, promoting renewable sources and energy, and climate change. Among the achievements are the creation of a Mexico-SIEPAC Commission to cooperate with the regional electricity market and approving the 2015-established Mesoamerican Programme for the Rational and Efficient Use of Energy (PMUREE) to set norms and standards.

The [Caribbean Centre for Renewable Energy and Energy Efficiency](#) (CCREEE) of the Caribbean Community (CARICOM) was launched in 2018. It was linked to the 2013 CARICOM Energy Policy (CEP) and the 2015 Caribbean Sustainable Energy Roadmap and Strategy (C-SERMS), providing orientation for the Energy Programme of CARICOM. CCREEE's Pillar programmes to support energy transition are the CARICOM Energy Knowledge Hub, the Integrated Resource and Resilience Plan, and the Project Preparation Facility. In 2022, sieCARICOM was created in collaboration with OLADE as a new Energy Information System to provide information to governments and other

stakeholders. In 2016, the [Technical Assistance Programme for Sustainable Energy in the Caribbean](#) (TAPSEC) was launched with the support of the European Development Fund (EDF). Among other projects the TAPSEC developed, the [Regional Energy Efficiency Strategy and Action Plan](#) (REES and REEAP) were designed to address this issue at the regional and national levels by creating a detailed energy efficiency roadmap. It provides a regionally focused strategic approach. The Andean Community (CAN) also has an [Andean Electrical Interconnection System](#) (SINEA) that was created in 2011 to develop an Andean electrical corridor and advance the creation of a Regional Andean Electrical Market (MAER). SINEA seeks energy resource complementarity among the Andean countries with an important role in renewable energies. [Decision 816](#) of 2017 established the regulatory framework for the subregional interconnection of electrical systems. The SINEA 2020-2030 Roadmap was then updated in 2023 to achieve regional energy sovereignty through a fair, gradual and responsible transition. This program is supported by the Inter-American Development Bank (IDB).

In the Southern Cone, the [Energy Integration System for Southern Countries](#) (SIESUR) was created in 2018 to facilitate cooperation between Argentina, Brazil, Chile, Paraguay and Uruguay, with the support of the IDB. It has developed a SIESUR 2023-2032 Roadmap to facilitate electricity exchanges and promote complementarities. For this purpose, they perform [SIESUR Reports](#) to identify and evaluate the international electrical interconnections of SIESUR member countries. They also conducted an updated study on the technically functional complementarities based on the recent and significant development of renewable energies in some subregion countries. In addition, they also evaluate the opportunities for intensifying the binational electricity exchanges between the SIESUR countries in the short and medium term.

The EU regional initiatives

The EU has developed a set of instruments to incorporate the SDGs into its development agenda while promoting an accelerated recovery. At the end of 2019, to continue fulfilling its commitments to the 2015 Paris Agreement, the European Commission (EC) proposed the “[European Green Deal](#)” as an ambitious set of energy, environmental and climate policy proposals to achieve a carbon-neutral economy by 2050. In addition to this framework plan, the EU has developed a series of legal instruments, programmes and financial instruments that address climate change and sustainable development in a multidimensional way. This section will only include those that are most related to SDG 7.

[European Climate Law](#) (2021) seeks to ensure that all EU policies contribute to SDG7 and that all sectors of the economy and society help to achieve a climate-neutral in Europe’s economy and society by 2050. The law also sets the intermediate target for reducing net greenhouse gas emissions by at least 55% by 2030, compared to 1990. Climate Law includes measures to keep track of progress and regular reports by the

European Environment Agency. The progress will be reviewed every five years, in line with the global exercise under the Paris Agreement. Additionally, the law proposes the establishment of the European Scientific Advisory Board on Climate Change¹², which will provide independent scientific advice and recommendations. The Commission and the Member States must report the measures taken and the results achieved towards effective decarbonisation in 2050.

[The Green Deal](#) (2019) was presented as the new growth strategy to transform the European economy into a more efficient and sustainable one, following the objectives of combating climate change. One of the challenges is that the green transition is fair and inclusive, prioritises people, and focuses on the regions, industries and workers that will face the most significant challenges. Along with national governments, other actors such as local authorities, businesspeople and unions, and civil society are also involved.

Two of the proposed goals are directly related to SDG 7. The first strives (to reduce GHG emissions by 50-55% by 2030 compared to 1990 and reach carbon neutrality in 2050. The second seeks to achieve a clean and affordable energy supply. The Communication foresees the need for an investment plan, the development of new cooperation instruments, and national measures to implement the objectives effectively. It also includes the initiative to create the European Climate Pact¹³ to share initiatives and encourage the participation of various governmental and non-governmental actors to accomplish the objectives of the Green Deal.

For the EU to accomplish the 2030 target, the Commission proposed the [Fit for 55](#), a new and revised legislation package that will deliver the European Green Deal package (2021). It comprises 13 interlinked revised laws and six proposed laws on climate and energy. These measures include, for example, a new EU emissions trading system and the carbon border adjustment mechanism, but three are directly related to SDG 7 indicators. One of these measures is the establishment of the Social Climate Fund. Its objective is to finance efforts to support vulnerable households, micro-enterprises and transport users to cope with the effects of rising energy prices. This fund will be funded by Revenues from the new emissions trade system, and national contributions will finance this fund.

Fit for 55 also includes a proposal to revise the Renewable energy directive to boost the current EU-level target of 32% of the energy mix to at least 40% by 2030. It also will establish sector-specific targets for transport, buildings, and industry. On 30 March 2023, the Council and Parliament reached a provisional deal on the proposal of the new directive¹⁴.

Another measure of the Fit for 55 Package is the revision of the EU energy efficiency

12. <https://climate-advisory-board.europa.eu/about>

13. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2020%3A788%3AFIN>

14. <https://www.consilium.europa.eu/en/press/press-releases/2023/03/30/council-and-parliament-reach-provisional-deal-on-renewable-energy-directive/>

directive, which aims to reduce the EU's final energy consumption by 11,7% compared to projections for 2030. The new proposal includes national savings obligations and rules to decrease energy consumption in public buildings. In March 2023, a provisional agreement was reached between the council and the Parliament was reached.¹⁵

[REPowerEU Plan](#) is a measure to deal with the energy crisis, reduce dependence on Russian gas through renewable energy, and diversify suppliers. On the one hand, the supplies from Canada, Norway, Azerbaijan, Egypt, Israel, Algeria and other sub-Saharan African countries increased. On the other hand, investments will be accelerated to facilitate the energy transition through the Global Gateway initiative, accelerating the development of renewables, further developing an EU hydrogen market, improving the interconnection of the European electricity and gas network, improving energy efficiency and promoting circularity. The Recovery and Resilience Facility (RRF), established in the aftermath of the COVID-19 crisis as a temporary instrument to mitigate the pandemic's economic and social impact, is the main funding tool for the plan. The focus of investments will be improving infrastructures for security supply, boosting energy efficiency in buildings, decarbonising industry, increasing the share of renewable energy, reducing energy demand, addressing distribution bottlenecks, supporting storage and addressing energy poverty.

The [Just Transition Mechanism](#) (2021) is a new financial instrument in cohesion policy whose objective is to support territories facing serious socio-economic challenges derived from the transition process to climate neutrality and avoid increasing regional disparities. Its main objective is to lighten the impact of the transition by financing the diversification and modernisation of the local economy and mitigating the negative repercussions of employment. To achieve this goal, the Just Transition Fund supports investments in digital connectivity, clean energy technologies, emissions reduction, industrial zone regeneration, worker retraining and technical assistance. The Just Transition Fund has an overall budget of EUR 17.5 billion for 2021-2027. EUR 7.5 billion will be financed under the multiannual financial framework and another EUR 10 billion under Next Generation EU. Member States can complement their allocation from the Just Transition Fund with the resources they receive from the European Regional Development Fund and the European Social Fund Plus. To access the support of the Just Transition Fund, Member States must submit territorial just transition plans indicating specific areas of intervention. The allocation criteria are based on industrial emissions in regions with the highest carbon dioxide intensity. The Just Transition mechanism intends to protect the people by improving energy-efficient housing, investing in fighting energy poverty and facilitating access to clean, affordable and secure energy.

In July 2020, the European Council agreed on an exceptional temporary recovery instrument, [Next Generation EU](#), endowed with 750,000 million euros for all Member States. The Recovery Fund ensures a coordinated European response to address the economic and social consequences of the pandemic with Member States. The funds

15. <https://www.consilium.europa.eu/en/press/press-releases/2023/03/10/council-and-parliament-strike-deal-on-energy-efficiency-directive/>

can be used to grant reimbursable loans and non-reimbursable transfers. The two instruments with the highest volume of the Next Generation EU are the Mechanism for Recovery and Resilience (MRR) and the REACT-EU Fund. The Mechanism for Recovery and Resilience (MRR) constitutes the central nucleus and is endowed with 672,500 million euros to support investment and reforms. The REACT-EU Fund is endowed with 47,500 million euros and operates as a structural fund with greater flexibility and agility in its execution. At least 30% of the Next Generation Funds will be devoted to tackling climate change and green projects.

4 Interregional Initiatives

This section analyses how the EU cooperates with Latin America, the Caribbean and Africa to support the regional multilateral initiatives mentioned above. Many initiatives and their dispersion make it challenging to identify them, but the most outstanding ones can be featured.

EU-Africa

The Africa-EU Energy Partnership (AEEP) was created in 2007 by African and European Heads of State at the AU-EU Summit in Lisbon, Portugal, as a key political platform through which both continents work together on energy. The AEEP aim is to facilitate universal access to affordable, sustainable, modern energy services in Africa, including rural areas.

The AEEP supports the 2022 [African-EU Green Energy Initiative](#) (AEGEI). EU has proposed making energy access one of the main pillars of its Green Deal cooperation with Africa. The initiative focuses on three SDG 7 aligned priorities: (1) increasing the number of African people, businesses and industries having access to affordable, modern and sustainable energy services; (2) supporting investments in renewable energy generation; (3) promoting energy efficiency. The infrastructure component of the AEGI includes enhancing access to clean energy via decentralised off-grid solutions and mini-grid generation for access to sustainable energy in North Africa, West Africa, Central Africa, Eastern Africa and Southern Africa Power Pools.

AEGEI includes the flagship initiative «[Just Energy Transition Partnerships](#) » (JETP) created at COP 26 to help partner countries to achieve the energy transition, including their engagement towards better access to clean, affordable and secure energy, the greening of their energy mix through key investments in areas, such as renewable energy and storage, energy efficiency in key sectors of the economy (industry, buildings and appliances, transport).

The AEEP promoted the creation of [Africa- EU Renewable Energy Cooperation Program](#) (RECP) in 2010 to support policy advisory, private sector cooperation, innovation and skills development and to contribute to the targets of the Africa-EU Energy Partnership, the Sustainable Energy for All initiative. In 2018, the name was changed to GET.invest. The EU supports investments in decentralised renewable energy through this programme. Since 2022, the programme has powered the [Team Europe One Stop](#)

[Shop for Green Energy Investments](#), an access point for information facilitating access to European support and financing instruments for African companies with energy projects. The AEEP also undertakes the [Mapping of Energy Initiatives and Programs in Africa](#) with the input of The Sustainable Energy for All (SE4All), which was first published in 2016, and then created the platform [Mapping and Monitoring of Energy Initiatives and Programmes in Africa](#) (MMEIPA)

In addition, the EU supports the [Digital Energy Facility](#). This programme supports innovative solutions for energy access in collaboration with the private sector, including start-ups and digital ecosystems active in energy access. It also supports power utilities to develop comprehensive roadmaps and investment plans to improve their performance by integrating smart grids and new digital solutions in their operations.

The European Commission launched in 2019 the “[Covenant of Mayors in Sub-Saharan Africa](#)” (CoM SSA) to support African cities by ensuring access to affordable, reliable, sustainable and modern energy and adapting to the effects of climate change by increasing their planning capacities and providing them with a platform to share knowledge and best practices. The CoM SSA draws inspiration from the success of the “Covenant of Mayors Europe” (CoM Europe), which united 6700 municipalities in the struggle against climate change.

The [Electrification Financing Initiative \(ElectriFI\)](#) is an investment facility launched in 2015 by the European Union and managed by European Development Finance Institutions, committed to increasing access to clean energy in developing countries. As part of the Global Energy Transformation Program (GET.pro), the EU created [GET transform](#) that is a European multi-donor platform delivering on international energy and climate goals and draws on the experience of the former program EUEI PDF, which provided energy policy advisory for 13 years in more than 35 countries. In Africa, GET transform works with energy ministries and national and regional planning commissions on three main topics: Long-term Energy Planning, Off-grid Regulations and markets and Renewable Energy Grid & System Integration.

The EU also finance the African Union also host the above-mentioned Geothermal Risk

The AEEP published the second annual [European Financial Flows on SDG7 to Africa in 2023](#) that covers the 2014-2022 period assessing the progress towards achieving the SDG7 objective of providing access to cost-effective, dependable, sustainable, and modern energy for all. According to this report, the EU and the Member States contributed 1.3 billion Euros in loans and 465 million in donations to help Africa achieve SDG7. According to this report, the EU and the Member States contributed 1.3 billion Euros in loans and 465 million in donations to help Africa achieve SDG7.

More than 50% was allocated to Renewable Energies (1,078 million euros), followed by Transmission and distribution (778 million); far behind are energy efficiency (61.5 million), clean cooking (16) and clean transportation (1.6 million). According to available data, TEAM Europe (the EU and its Member States) is the main financier of projects aimed at SDG7, followed by international organisations (IOs), which are close behind. The EU and IO are the leading donors in the world while the EU mainly provides loans and the IO gives donations (AEEP, 2023). During the mentioned period, EU member states provided the most funds (8.9 billion euros), while EU institutions provided 571 million euros. The report highlights that regional economic communities (RECs) and regional power pools play a crucial role in “not only promoting cross-border economic integration but also in facilitating investment in the African energy sector” (AEEP, 2023). The Sahel Community of States received the largest amount of commitments for Energy (7.3 billion euros), followed by the Common Market Fund for Eastern and Southern Africa (3.1 billion) and the ECOWAS (3 billion euros).

EU-Latin America and The Caribbean

The energy transition has become one of the pillars of the EU and Latin America and cooperation, with cooperation programmes seeking synergies with existing initiatives in the region. Nonetheless, the great fragmentation makes regional cooperation challenging. (Escribano and Urbasos, 2023). [EuroClima, conceived at](#) the V EU-LAC Summit in 2010, is the main regional cooperation project involving energy issues between the EU and Latin America. After two phases of Euroclima(2010-2013) and (2014-2017), Euroclima + was created. It supports mainly national actions but also regional projects with the participation of several countries. In addition to the European Commission, various agencies of the Member States and regional organisations, such as ECLAC and

the United Nations Environment Program (UNEP), are involved in this programme. Programa EUROCLIMA+ accompanies Latin American countries to strengthen their climate governance and design, update and implement climate policies. This enables them to have legislation and plans or NDCs adapted to their realities and access to financing.

The program has six [lines of action](#): (1) developing national plans and policies to manage climate change and comply with the Paris Agreement; (2) strengthening financing frameworks; (3) improving transparency; (4) coordinating across different sectors; (5) promoting education and sensitisation; and (6) incorporating a gender perspective. In all lines, national programmes predominate, but some have a regional perspective, although few are directly linked to SDG 7. An example is the [High-level dialogue and regional cooperation on electric mobility](#) with the support of UNEP. Another project implemented by ECLAC is the [Monitoring of Climate Financing in Latin America and The Caribbean](#). ECLAC also participates in the [Dialogue Between Peers to Promote the Implementation of NDC in Latin America](#) and has also created the [Greenhouse Gas \(GHG\) Monitoring System](#). The programme has also projects focused on energy efficiency, mitigation of greenhouse gases and the construction of energy-efficient buildings, but they are mainly bilateral. From 2023 EUROCLIMA+ will contribute to the Global Gateway Investment Agenda, which offers public financing to leverage private capital and investment for projects that contribute to the green and digital twin transition. The EUROCLIMA+ implementing entities have been expanded to include UNDP, the Agence Francaise de Développement (AFD), the German Development Agency (GIZ), the Spanish Agency for International Development Co-operation (AECID), the ECLAC, the International and Ibero-American Foundation for Administration and Public Policies (FIIAPP) and the UNEP. In 2023, the initiative Green Transition Latin America and the Caribbean-Climate and Energy will be launched in several countries, but still on a national basis. Among the [Global Gateway EU-LAC flagship projects in 2023](#), the regional initiatives are digital forestry and social inclusion, not energy.

The EU [Caribbean Investment Facility](#) (CIF) and the [Latin America Investment Facility](#) (LAIF) are supported by The European Investment Bank (EIB) funds to mobilise funds and other support for development projects, including Energy as one of the priority sectors. The EIB has been in charge of mobilising resources for electrical infrastructure projects. [Climate change mitigation and adaptation is](#) one of the main lines of work in [ENEL Energy Efficiency & Renewables FL \(LATAM\)](#) is an important regional project consisting of a Framework Loan to support investments promoted by Enel S.p.A. Group selected operating companies in Latin America in eligible renewable energy generation and energy efficiency programmes. The project is expected to contribute to the achievement of the UN 2030 Agenda, in particular the achievement of SDG 7 (affordable and clean energy) and 13 (climate action). However, most of the projects have a national scope. The EIB also finances the [LATAM Energy Efficient Housing Fund](#) to improve energy consumption standards in the health and education sectors, together with the Caribbean Development Bank.

As part of the [Global Energy Transformation Program](#) (GET.pro), the EU created GET.transform, a European multi-donor platform delivering on international energy and climate goals. GET.transform draws on the experience of the former programme EUEI PDF, which provided energy policy advisory services in over 35 countries for 13 years. In Latin America, Get.transform supports regional and national institutions in identifying knowledge gaps in energy and climate planning processes and offers capacity building and analytical support through training, dialogues and knowledge products. One is the above-mentioned FOREPLEN, organised by ECLAC. In addition, GET.transform works with energy ministries, and national and regional planning commissions in Latin America on three main topics: Long-term Energy Planning, Off-grid Regulations and Markets, and Renewable Energy Grid & System Integration.

[The Technical Assistance Programme for Sustainable Energy in the Caribbean](#) (TAPSEC) is a five-year programme initiated in 2016 and funded by the German Federal Ministry for Economic Cooperation and Development (BMZ) and the EU to provide technical and financial assistance to regional institutions committed toward low-carbon climate-compatible energy sustainability. TAPSEC works with the CARICOM Secretariat, the CCREEE and the Dominican Republic's Ministry of Energy and Mines (MEM) to develop and execute initiatives to expand regional access to modern, affordable, sustainable energy services.

Although the EU has financed many SICA integration projects and has a [Technical Assistance Project for strategic programming in Central America](#) (AETPECA), none of the regional [projects currently being implemented have a](#) direct link to SDG 7. However, in 2018, the EU launched the [Green Fund initiative for the SICA, which](#) includes the [Green MIPYMES II](#) to promote programmes aimed at the generation of renewable energy and the adoption of energy efficiency measures in micro, small and medium-sized companies to improve resilience to climate change in vulnerable areas. The EU, German KdW and Central American Bank for Economic Integration (CABEI) provided the funds. On the other hand, the SICREEE project is financed by the Austrian cooperation. The EIB's cooperation with CABEI for the financing of infrastructures has developed steadily. The EIB also provides co-financing for the SINEA, the Andean Energy integration initiative, in collaboration with the IDB for the interconnection between Ecuador and Peru.

At the second [EU-LAC ministerial meeting on the environment and climate change](#) held in May 2023, the ministers of both regions promised to intensify cooperation to promote the energy transition and present proposals at the next EU-CELAC Summit to be held on July 17 and 18 in Brussels. However, contrary to what happens in the case of Africa, there is neither a report on the contribution of the EU to SDG 7 in Latin America and the Caribbean nor a mapping of the different projects contributing to the region. This makes it difficult to have a coherent roadmap that contributes to achieving the goals in the most efficient.

Conclusions

The energy transition is a priority throughout the Atlantic region, but achieving the 2030 Agenda's Goals, specifically SDG 7, has not advanced sufficiently. Africa continues to have a deficiency in electricity access due to large regional inequalities and a significant urban-rural gap. Due to the increase in demand, this region has not been able to reduce the lack of access, which remains a great challenge. In addition, there is a deficit of access to clean energy for cooking, which has negative health consequences. The way to achieve universal, sustainable and healthy access, in addition to contributing to improving efficiency, all of which are pending SDG 7 goals, is replacing the use of traditional biomass with renewables. However, to expand coverage and regional interconnection, green hydrogen is presented as the future solution for supplying deficit areas and exporting outside the region, such as the European market.

The lack of coverage in Latin America affects the Caribbean, but progress is generally made towards universal coverage. The emphasis must be on overcoming the gaps between regions and urban and rural areas. Access to clean energy for cooking remains a challenge in the latter. Although the region's electrical matrix is the most sustainable thanks to hydroelectric production, its growth capacity is limited; therefore, it is necessary to promote diversification. Improving infrastructures to improve energy efficiency, including the interconnection between countries and regions, is an important challenge.

Europe has a wide distribution network that guarantees universal access, but the energy crisis has revealed its reliance on fossil fuel imports. The diversification of the energy matrix is essential to achieve the security of supply at affordable prices. This has accelerated the installation of renewable energy capacities and improved energy efficiency as tools to achieve sustainability and energy security. However, it must also diversify its supply sources; the Atlantic area offers great opportunities.

Interregional cooperation is a tool for achieving SDG 7. However, it faces difficulties due to the need to develop infrastructures, financing and regulatory frameworks that facilitate private-sector investment. Multilateral cooperation initiatives have been launched in the three regions, some linked to the global multilateral framework and others with strictly regional or subregional scope. Asymmetries of all kinds (development, institutional, and regulatory) hinder the progress of some initiatives launched, but the worsening financing deficit during the pandemic. Promoting a rebound in financing and aligning the different sources of financing with common objectives is essential to achieving SDG 7's objectives. The regional institutional framework in which the three regions operate is very diverse.

In Africa, regional and subregional institutional structures are interconnected. The AU provides an umbrella under which the sub-regional RECs are interlinked. The CAHOSSC also articulates regional initiatives such as the AREI, which includes a monetary fund, the African Clean Energy Corridor or the African Single Energy Market or the SEFA of the ADB and, in turn, is related to Global initiatives within the framework of the United Nations, such as the GSDG 7 Initiative for Africa launched by the ECA, or IRENA. Each subregional organisation has created energy cooperation organisations and regional centres to develop renewable energies, such as ECREEEE, EACREEE, SACREEE or CEREEAC, which form a network that covers the entire continent. This facilitates south-south cooperation within the region and triangular cooperation with international organisations and other donors. The AREI also has developed instruments to map existing initiatives that facilitate donor coordination and contribute to generating regulatory frameworks that facilitate public and private investment and allow progress and results to be monitored. This structure has facilitated the relationship with the EU through the

In Latin America, there are also regional and subregional structures, but the institutional framework is much more fragmented. OLADE is a platform that promotes regional cooperation, but its function is limited to providing information and carrying out studies, which include progress in the SDG 7 target. Since 2018, CELAC has promoted FOREPLEN to coordinate Strategic Planning and created the ROSE Observatory to promote regional complementarities. OLADE and FOREPLAN collaborate with IRENA and are interrelated with other initiatives such as ARIARE, various information platforms and RELAC. These new regional initiatives aim to create an institutional structure that articulates them, but their recent creation makes it difficult to assess their impact.

The situation at the subregional level is very diverse. SICA has the most solid institutional development and has advanced towards regional energy integration. It has SIEPAC, a 2030 regional strategy and a SICREEE centre for renewables comparable to those of African regional organisations and also linked to UNIDO. Central American integration is also coordinated with the Mesoamerica Plan, which has a plan to improve energy efficiency and electrical interconnection. The Caribbean has a similar institutional structure, although the energy integration policy is more recent. The creation of a regional strategy for renewables and another for energy efficiency, using an information system such as Sicare and the CCREEE, provides a regional approach that facilitates resource capture from countries that need international cooperation. SINEA also seeks to create an Andean interconnection market and has IDB support. However, it has recently approved a roadmap pending implementation, and legal instruments are currently being created to advance the interconnection. The SIESUR has recently been created in the Southern Cone, and although there are already some bilateral interconnections, the first roadmap for 2023-2032 development is being studied.

The Green Deal offers a multidimensional regional strategy for EU compliance with the Paris Agreements. For this, it has a package of specific legislation to comply

with SDG7 and specific funds to achieve the planned goals. The crisis caused by the war in Ukraine has accelerated plans to reduce dependency and improve electrical interconnection that was not yet consolidated. Interterritorial and intergenerational solidarity mechanisms have also been established. All these internal apparatuses provide it with tools to contribute to the cooperation and technology transfer actions demanded by SDG 7, but asymmetries condition cooperation with other regions.

Cooperation with Africa has a regional framework instrument, such as the AEEP, which allows for joint planning and development of the AEGEI. It is fully aligned with SDG 7's three pillars and is linked to the United Nations JETP initiative. This framework also favoured the TEAM Europe approach to working together between the EU and its member states. The institutional structure and joint strategy facilitated the creation of the MMEIPA, provided information on all regional energy cooperation initiatives and prepared a report on the funds that the EU invests in Africa to achieve SDG 7 with statistical data and analysis. The data shows that between 2014 and 2020, most of the resources have gone to the renewable energy and energy transmission and distribution sectors, which correspond to the goals SDG 7.1 and 2. However, very few resources have been used for clean cooking, one of the region's most deficient sectors. Neither SDG 7.3's energy efficiency has received much funding (AEEP European, 2023). The same report points out the importance the RECs have had as recipients. It highlights that a significant part of the funds was allocated to support regional integration and cross-border cooperation. Regarding renewables, the data shows a growing diversity of sources, with generation based on multiple technologies as dominant. The report also points out collaboration and alignment with multilateral institutions, including financial and non-financial organisations, are essential for achieving the SDG 7 targets.

In the case of Latin America, there is no region-wide global strategy. The Euroclima + project includes part of SDG 7's objectives but is not specifically designed to achieve its goals. In collaboration with regional organisations, initiatives on energy efficiency, renewable sources, and clean home access have been developed but are fragmented. Support for regional initiatives has been done fundamentally through the EIB for financing interconnection infrastructures and supporting other regional financial organisations. Except for Central America and somewhat less the Caribbean, regional cooperation has not advanced much until very recently, making it difficult to attract international investment (Batalla and alt, 2020). New interconnection initiatives are an opportunity to improve interregional cooperation, but they remain highly fragmented and face regulatory problems.

The comparative analysis shows that initiatives to promote the energy transition have accelerated in all regions, opening new avenues for interregional cooperation. Africa faces outstanding deficiencies, but it has developed a regional institutional framework to attract investment to advance towards market integration while reducing asymmetries. Latin America starts at a more favourable starting point but has institutional and regulatory problems. There are, however, international cooperation

opportunities between the two regions that have not yet been explored. Through its financing and technology transfers, the EU could stimulate triangular cooperation with the collaboration of international organisations of a global nature that operates in both regions. Initiatives such as the Global Energy Transformation Program (GET.pro.) and the Global Gateway should be more integrated and can serve as exchange and mutual learning mechanisms.

Although progress has been made in monitoring compliance with the SDG 7 targets, there are still information gaps, especially about the impact of cooperation policies and mechanisms. In Africa, the EU mapped its initiatives for financing SDG 7, an exercise that ECLAC's monitoring mechanisms could replicate in Latin America. The renewal of the bi-regional strategic association between the EU and CELAC, which will take place in July 2023, is an opportunity to promote interregional cooperation in energy transition and boost the relations in the Atlantic area to contribute to Sustainable Development Agenda's goals.

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About the Project

The Jean Monnet Atlantic Network 2.0 is a small network of six members that keep intense communication and joint activities on the Atlantic Basin. The Network also serves as a central arena for discussing globalisation and key major trends in the several Atlantic microcosms. By combining the national with the regional perspective, its research and debates take into account the different foreign interests and pressures, as well as a critical view on the possible roles and future of the European Union (EU) in the area.

It is the present link of a long chain of projects. In 2016, the project that established the first Jean Monnet Network on Atlantic Studies (jeanmonnetnetwork.com.br) sought to foster knowledge and co-operation among scholars and researchers on topics of fundamental importance for Atlantic actors in general, and for the EU, in particular. It involved a greater number of centres and universities.

Seven years later, still focussed on the original three broad thematic axes -Energy/Sustainability, Trade/Economy (International Economic Flows) and Security/Inequality-, the Jean Monnet Atlantic Network 2.0 represents a continuation and a rupture with the previous undertakings.

It intends to offer a wide, innovative and sometimes controversial view on Atlantic problems and the expectations on and scope of the EU activities relative to them. The papers in this series are a sample of its achievements.





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