



Regional responses to the energy crisis in the Atlantic. An analysis from the perspective of SDG 7.

Anna Ayuso, Barcelona Center for international Affairs

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RESEARCH QUESTIONS

- What is the state of compliance with SDG 7 in the Atlantic regions?
(Africa, Europe and Latin America and the Caribbean)
- How did the COVID19 Pandemic affect the implementation of the SDG 7 targets?
- What kind of cooperation initiatives have been launched in each region to comply with SDG 7?
- What interregional cooperation initiatives to achieve SDG 7 have been launched in the Atlantic?
- Conclusions and recommendations.

SDG 7 GOALS

- 7.1 By 2030, guarantee *universal access* to affordable, reliable and *modern energy* services.
- 7.2 By 2030, significantly increase the *share of renewable energy* in the mix of energy sources.
- 7.3 By 2030, double the global rate of improvement in *energy efficiency*.

NEEDS AND CAPACITIES OF EACH
REGION TO FACE THE ENERGY
TRANSITION ARE VERY DIFFERENT.

Mapping Exercise

REGARDING AFFORDABLE UNIVERSAL COVERAGE

- In **Africa** the main lack is access to energy. Universal coverage is far from being a reality, especially in sub-Saharan Africa.
- In **Latin America**, there are also regional disparities, although smaller. The region with the least connectivity is the Caribbean but the trend is positive to achieve the SDG 7
- In **Europe**, the lack of access to the electrical network is residual, the biggest problem is the high price that means that more than 20% of the population is in a situation of energy poverty.

REGARDING RENEWABLE ENERGY:

- The **EU** is the region of the three that has been investing more in renewable energy but still has the matrix most dependent on fossil fuels, most of which are imported.
- **Africa** is the region with the biggest share of renewables for energy supply, but that is because traditional uses of biomass for heating and cooking.
- If traditional biomass is excluded, **Latin America** is the region with the highest percentage of renewables thanks to hydroelectric projects and the use of ethanol for industrial use and fuel for transportation.

ENERGY EFFICIENCY

- **Africa** has the world's lowest levels of per capita use of modern energy, but the demand is growing (population and urbanization)
- The monitoring of SDG 7 shows that **EU** progressed in the efficiency of energy consumption but still is very dependent in oil imports.
- **Latin America and the Caribbean** have the best energy intensity indices in the world, but at the same time with the lowest improvement rates.

AFRICA ACCCES

- 2014 - 2019 the number of Africans without electricity decreased, but with the pandemic the investment in connections slowed.
- In 2021, the **lack of electricity in Africa increased by 4%** compared to 2019
- **North Africa** has the highest access to electricity on the continent (90.7 %), although the share of the rural population is lower (88%).
- **Central Africa** has the lowest percentage of the population with electricity among the African subregions, estimated at around 28.7%
- Access to electricity in **southern Africa** also remains a challenge with only 52% of the population.
- Only 17% of the population has access to **clean energy** for cooking in Sub-Saharan Africa and remains the only region in which the number of people without access to clean fuels and technologies is rising
- Universal access to affordable electricity by 2030 in Sub-Saharan Africa, requires triple the rate of recent years.

AFRICAN RENEWABLES

- The region where renewables constitute the **largest share** of the energy supply is in Sub-Saharan Africa, because traditional uses of biomass for heating and cooking.
- The use of traditional biomass constitutes 85% of renewables in Africa.
- They are very inefficient sources and release a large percentage of gases that contribute to climate change.
- Natural gas is expected to play the biggest role in North Africa (45% of the total mix, while Solar will make up 9% and wind 7%)
- Renewables will have a greater prominence in Sub-Saharan Africa, with solar making up 12%.

EFFICIENCY IN AFRICA

- Africa has the world's lowest levels of per capita use of modern energy.
- Under existing subsidy schemes, current price spikes risk doubling energy subsidy burdens in African countries in 2022.
- Africa's vast resources of minerals that are critical for multiple clean energy technologies are set to create new export markets
- Global declines in the cost of hydrogen production could allow Africa to deliver renewables-produced hydrogen to Northern Europe at internationally competitive price

ACCES IN LATIN AMERICA

- The region expanded its coverage, managing to bring the deficit in 2000 from 10.96% to 2.85% in 2018
- Access at the urban level shows a deficit of around 0.52%, which expresses that universalization is highly probable by the year 2030.
- In contrast, at the rural level there is a deficit of 11.31% in 2019
- South America is the region that has advanced the most (98%), while in the Caribbean is below 81% and Central America the deficit is 7.9%
- The goal of universalizing access can be achieved by 2030.

RENEWABLES IN LAC

- Renewable energies, which contributed effectively and efficiently to the electrification of rural areas.
- Excluding traditional biomass, America is the region with the highest percentage of renewables thanks to hydroelectric projects (44%) and the use of ethanol for industrial use and fuel for transportation.
- Brazil is the country in the region with the highest percentage of renewable energy.
- Capacity expansion rates show significant increases from 2014, date from which annual increases of more than 5% are observed

EFFICIENCY IN LAC

- Power capacity per capita in Latin America grew by 4.1% and diversified with the addition of solar and wind power.
- Latin America and the Caribbean have the best energy intensity indices in the world, but at the same time with the lowest improvement rates.
- electrification contributed to improving efficiency rates with the use of more efficient and modern energy sources in residential and industrial sectors.
- The SDG 7.3 indicator could be met by accelerating the rates of reduction in energy intensity.
- Central America and the Caribbean have improved their energy efficiency, South America, also but to a lesser extent.

ACCES IN EUROPE

- In Europe, the possibilities of connection to the electricity grid are mostly guaranteed the problem is the prices.
- In 2020, 20.0% of people with income below the poverty line reported that they could not keep their home adequately warm (1.8 % more than in 2019).
- 5.8% of people with incomes above the poverty line who could not afford to keep their homes adequately heated, an increase of 1.2 percentage

RENEWABLE IN EUROPE

- The use of renewable energy has grown continuously in the EU, with its share doubling since 2005. By 2020, reached 22.1%.
- More than 80% of the growth of renewables in Europe corresponded to solar and wind energy.
- Measures 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%.
- 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
- 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.

EFFECIENCY IN EUROPE

- The monitoring of SDG 7 shows that progress has been made in the efficiency of energy consumption.
- Household energy consumption per habitat appears to have stagnated over the last five years.
- Measures taken in response to the pandemic of COVID-19 with the restrictions related to public life and lower economic activity significantly reduced consumption in 2020 and the EU was able to reach its 2020 target.

REGIONAL COOPERATION IN AFRICA

- African Group of Negotiations on Climate Change (AGN)
- African Renewable Energy Initiative (AREI) - AU
- African Single Electricity Market (AfSEM) - AU
- Geothermal Risk Mitigation Facility for Eastern Africa – AU
- Sustainable Energy Fund for Africa (SEFA) – ADB
- Africa Renewable Energy Fund (AREF)
- Facility for Energy Inclusion (FEI)
- Africa Clean Corridor (ACEC)
- SDG7 Initiative for Africa – ECA

SUBREGIONAL COOPERATION IN AFRICA

- Western African Power Pool (WAPP) –**ECOWAS**
 - The ECOWAS Regional Center for Renewable Energy and Energy Efficiency (ECREEE)
 - ECOWAS Renewable Energy Policy (EREP)
 - ECOWAS Energy Efficiency Policy (EEEP).
- Regional Strategy on Scaling-Up Access to Modern Energy Services – **EAC**
 - East African Center of Excellence for Renewable Energy and Energy Efficiency,(EACREEE)
- The Southern African Development Community Center for Renewable Energy (SACREEE) –
SADC
- The Centre for Renewable Energy and Energy Efficiency for Central Africa (CEREEAC)-**ECCAS**

LATIN AMERICA REGIONAL INITIATIVES

- Latin American Energy Organization (OLADE),
Latin American and Caribbean Energy Information System (sieLAC)
Energy Panorama of Latin America and the Caribbean
- Regional Forum of Energy Planners (FOREPLEN) – ECLAC
Regional Observatory on Sustainable Energies (ROSE)
- Iniciativa Renovables en Latinoamérica y el Caribe (RELAC)
- Hub platform of Energy Latin America and the Caribbean -BID +
- Observatory of Energy Management Systems in Latin America and the Caribbean – BID+
- Latin American and Caribbean Council on Renewable Energy (LAC-CORE)

SUBREGIONAL INITIATIVES IN LAC I

SICA

- Electrical Interconnection System for Central American Countries (SIEPAC)
- Regional Electricity Market (MER).
- Sustainable Energy Strategy 2030 of the SICA countries (EESCA 2030)
- Regional Center for Renewable Energy and Energy Efficiency of the SICA countries (SICREEE)
- Mesoamerican Program for the Rational and Efficient Use of Energy (PMUREE)
- Mesoamerican Network for Research and Development in Biofuels (RMIDB)

CAN

- Sistema de Interconexión Eléctrica Andina (SINEA)
- SINEA 2020-2030 Roadmap

SUBREGIONAL INITIATIVES IN LAC II

CARICOM

- Technical Assistance Programme for Sustainable Energy in the Caribbean (TAPSEC)
- Caribbean Centre for Renewable Energy and Energy Efficiency (CCREEE)
- sieCARICOM
- Regional Energy Efficiency Strategy and Action Plan (REES and REEAP)

SOUTH AMERICA

- Energy Integration System for Southern Countries (SIESUR)

THE EU REGIONAL INITIATIVES

- European Climate Law, (2021)
- The European Green Deal (2019)
- Fit for 55. Delivering the European Green Deal package (2021).
- REPowerEU Plan
- Next Generation EU (2020)
- Just Transition Mechanism (2021)

INTER-REGIONAL INITIATIVES EU- AFRICA

- Africa-EU Energy Partnership (AEEP) (2007)
- African-EU Green Energy Initiative (AEGEI)
- Just Energy Transition Partnerships » (JETP)
- Africa- EU Renewable Energy Cooperation Program (RECP)
- Team Europe One Stop Shop for Green Energy Investments
- Mapping and Monitoring of Energy Initiatives and Programmes in Africa (MMEIPA)
- Digital Energy Facility
- Covenant of Mayors in Sub-Saharan Africa” (CoM SSA)
- Electrification Financing Initiative (ElectriFI)
- European Financial Flows on SDG7 to Africa Report

INTER-REGIONAL INITIATIVES EU-LAC

- Program EUROCLIMA+
 - High-level dialogue and regional cooperation on electric mobility
 - Monitoring of climate financing in Latin America and the Caribbean
 - Dialogue between peers to promote the implementation of NDC in Latin America
 - Greenhouse Gas (GHG) Monitoring System.

EU-LAC ministerial meeting on the environment and climate change

- Caribbean Investment Facility (AIF)- EIB
- Latin America Investment Facility (LAIF) – EIB
- ENEL energy efficiency & renewables FL (LATAM) – EIB
- LATAM Energy Efficient Housing Fund
- Latin America GET.transform
- Technical Assistance Program for Sustainable Energy in the Caribbean (TAPSEC)
- Green Fund initiative for the SICA
- EU-LAC ministerial meeting on the environment and climate change

FIRST FINDINGS

- Promoting a rebound in financing and aligning the different sources of financing in common objectives is essential to achieve the objectives of the SDG 7
- In Africa there is an interconnected regional and subregional institutional structure under the AU umbrella and the sub-regional RECs are interlinked.
- Subregional organizations created energy cooperation organizations to develop renewable energies which form a network that covers the entire continent facilitating south-south and triangular cooperation.
- EU Cooperation with Africa has a regional framework instrument such as the AEEP that allows for joint planning and development of the AEGEI
- In Latin America regional and subregional structures institutional framework is much more fragmented.
- OLADE promotes regional cooperation, but its function is limited to providing information and carrying out studies
- At the subregional level, the situation is very diverse in LAC region.
- SICA is the most solid institutional development and has advanced towards regional energy integration.
- In the case of Latin America, there is no global strategy for the entire region.
- The Euroclima + project includes part of the objectives of SDG 7 but is not specifically designed to achieve its goals
- Although progress has been made in monitoring compliance with the SDG 7 targets, there are still information gaps