



No 424 | NOVEMBER 2024

SEE ENERGY BRIEF

Monthly Analysis

COP29 and Decarbonisation Challenges in SE Europe



Introduction

On November 24, it was finally agreed that rich countries will pay developing countries \$300 billion a year by 2035 to help them cope with the effects of the climate crisis. Earlier in the climate talks, held in Azerbaijan, it had been agreed that the most vulnerable countries need \$1.3 trillion a year to adapt to and combat the consequences of climate change. So, the final figure has been criticised by many (1). The question though remains as to who and how will actually pay this money.

India accused the COP presidency of agreeing the “paltry sum” without hearing the country’s opposition to it. Nigeria called the figure a “joke”. And Malawi said that for the least developed countries it was “not ambitious”. Others say that any deal is better than no deal, considering it had looked like negotiations could collapse after developing countries walked out of the room when \$300bn was proposed, saying their “needs are known” and “they are being ignored”.

The current Monthly Analysis will examine in detail the key outcomes of COP29, will argue that decarbonisation remains a key challenge in (SE) Europe and will analyse the minor changes in regional CO₂ emissions, as the energy transition is moving slower than initially anticipated.

Key Outcomes of COP29

After two weeks of intense negotiations, delegates at COP29, formally the 29th Conference of Parties to the UN Framework Convention on Climate Change (UNFCCC), agreed to provide a \$300 billion annual pledge, with an overall climate financing target to reach “at least \$1.3 trillion by 2035” (2). Countries also agreed on the rules for an UN-backed global carbon market. This market will facilitate the trading of carbon credits, incentivizing countries to reduce emissions and invest in climate-friendly projects. Furthermore, it is anticipated that through the operation of a global carbon market, funds will somehow be raised, which will go towards energy transition projects in developing countries.

These were among the big-ticket issues decided upon as the summit, underway since 11 November in the enormous Baku Stadium in the Azerbaijan capital, ran into double overtime. Other steps forward at COP29 included (a) extension of a programme centered on gender and climate change and (b) agreement on support for the least developed countries to carry out national adaptation plans.

This summit had been dubbed the “climate finance COP”, and representatives from all countries were seeking to establish a new, higher climate finance goal. The target, or new collective quantified goal (NCQG), will replace the existing \$100 billion goal that is due to expire in 2025. In the closing days at COP29, negotiating teams from the developed and developing worlds were deadlocked over a final deal, with reports that

representatives for least developed countries and the Alliance of Small Island States (AOIS) had walked out of the talks. (3)

Reacting to the outcome, UN Secretary-General António Guterres said that while an agreement at COP29 was absolutely essential to keep the 1.5-degree limit alive, “I had hoped for a more ambitious outcome – on both finance and mitigation – to meet the great challenge we face”. But he continued, “this agreement provides a base on which to build and added. It must be honoured in full and on time. Commitments must quickly become cash. All countries must come together to ensure the top-end of this new goal is met”.

For many vulnerable nations, it represents a glimmer of hope—but only if commitments translate into swift action. “Commitments must quickly become cash,” the Secretary-General stressed, urging all countries to work together to meet the upper end of the new financial goal. Beyond finance, COP29 built on previous gains in emissions reduction targets, the acceleration of the energy transition, and a long-sought agreement on carbon markets. These achievements come despite an “uncertain and divided geopolitical landscape,” which threatened to derail negotiations.

The UN chief commended negotiators for finding common ground, noting, “You have shown that multilateralism – centred on the Paris Agreement – can find a path through the most difficult issues.” UN Climate Change Executive Secretary Simon Stiell described the new finance goal agreed at COP29 as “an insurance policy for humanity”. “This deal will keep the clean energy boom growing and protect billions of lives. It will help all countries to share in the huge benefits of bold climate action: more jobs, stronger growth, cheaper and cleaner energy for all. But like any insurance policy – it only works – if the premiums are paid in full, and on time.”

He acknowledged that no country got everything they wanted, and that the world leaves Baku with a mountain of work to do. “So, this is no time for victory laps. We need to set our sights and redouble our efforts on the road to Belém,” in the eastern Amazonian region of Brazil, which is set to host COP30 next year. While some delegations applauded the deal, many from the developing world, including Bolivia and Nigeria, expressed their deep disappointment at what they argued was an “insultingly low” financing target and that the agreed text failed to significantly build on an agreement last year at COP28 in Dubai calling for nations to “transition away from fossil fuels”.

India’s representative strongly denounced the new goal, calling it a “paltry sum” and emphasizing, “We seek a much higher ambition from the developed countries [and the amount agreed] does not inspire trust that we will come out of this grave problem of climate change.” A representative from a group of small island nations said: “After this COP29 ends, we cannot just sail off into the sunset. We are literally sinking,” and the conference outcome highlighted “what a very different boat our vulnerable countries are in, compared to the developed countries”.

Decarbonisation Remains a Serious Challenge for the SEE Countries

In view of high energy security requirements, the issue of decarbonization acquires a new dimension. The key issue, which emerges in the present situation, is how to be able to reconcile increased energy security demands with the need to advance at the same time decarbonization policies.

As the EU moves towards committing to the decarbonisation of its economy to net-zero greenhouse gas (GHG) emissions by 2050, the SE European EU member states are still struggling with dysfunctional energy markets, blatantly inadequate long-term planning capabilities and an overwhelming dependence on fossil fuels.

Combined, these factors represent significant impediments to decarbonisation objectives. The successful transition towards a low-carbon future in the EU relies on the resolution of these problems and the acknowledgement of the different starting points of the SEE EU member states in the decarbonisation process.

With the ‘Clean energy for all Europeans’ package, the Regulation on the Governance of the Energy Union introduced a new cooperation framework between member states and the European Commission, which requires rigorous and standardised national energy and climate planning. A novelty of this package is that binding targets will only be set at the EU level. Under this mechanism, each member state is required to produce an integrated National Energy and Climate Plan (NECP) for 2021-2030, which will be updated once by 30 June 2024. Member states must also release progress reports, with the first one due in 2023. The plans must be written in a binding template in which governments must outline the actions and strategies to be pursued for each dimension of the Energy Union. Member states will also be obliged to consider the long-term 2050 perspective. The long-term strategies should be revised every five years and updated every ten years.

This framework provides both opportunities and challenges for all SEE countries. While the absence of binding national targets means that this governance framework represents a ‘softer’ mechanism, it is not any less robust. The NECPs depend on national initiative and management of commitments, which can provide the needed flexibility for tailoring individual solutions. Moreover, by providing a binding template, the governance framework can trigger the development of rigorous national energy and climate planning, which has often been lacking in SE Europe.

At the same time, however, this system may also lead to tensions between SE Europe, generally reluctant to undertake aggressive decarbonisation, and the Northern and Western member states. If SE European countries perceive their energy systems and security of supply to be vulnerable, they are likely to adopt very defensive positions at the EU level to maintain strict control over their national energy mixes. This can lead to insufficiently ambitious NECPs, which may prove difficult to correct at a later stage. Hence, if the governance

framework is to deliver on its objectives, the concerns of SEE member states cannot be ignored.

While more than half of the electricity generation capacity in SE Europe currently relies on thermal coal and lignite, a power system with a much higher RES deployment has been shown to be realistic. This will require drastic changes in the status quo. While the need for strategic planning is evident, the energy transition will also rely on a mix of rigorous and ambitious policy design, access to diverse financial instruments for investments, as well as functional and transparent energy markets, accompanied by effective social protection for vulnerable energy consumers.

Under these circumstances, one condition for a successful decarbonisation of the European economy is to understand the particularities of the EU member states in the SEE region as well as the Western Balkan countries in order to address specific problems with targeted policy and financial interventions. This requires not only increased attention and cooperation from both EU institutions and other member states, but it will also need substantial funding.

Based on a recent study (4), the main key factors identified that hinder a sustainable energy transition vary for each country, but regionally we assess them as follows, starting with the most important:

- **State control, geopolitics, lack of rule of law and accountability.** This broad set of issues encompasses energy sector decision-making which puts special interests ahead of the public interest. It includes everything from state-owned utilities' excessive influence on policymaking, to non-transparent energy deals with Russia and China and RES incentives schemes that benefit businesses close to governments.
- **Outdated view of the energy system, false solutions and lack of understanding of the speed of change.** It is often difficult to tell whether poor decisions on energy policy result from serving special interests or a lack of knowledge and analysis of the current state of the sector.
- **Incomplete transposition and implementation of EU rules affecting the energy sector.** EU environment, climate, energy and state aid rules, although not perfect, drive energy transition. The EU's environmental legislation also helps prevent destruction of sensitive areas, e.g. energy and transport infrastructure. Though the countries vary in their adherence to EU law, pollution control, air quality, state aid and biodiversity protection remain problems in most cases.
- **Lack of political courage to tackle coal mine closure and just transition.** Direct political pressure from coal mining unions is not as high in some of the countries as might be expected, but indirect pressure from regional bodies remains strong. The governments count on public utilities' employees and subcontractors for political support in elections, again raising the issue of state control. This, together with the fact that most governments have developed no plans to mitigate the social impacts of the

transition in coal regions and other fossil fuel-dependent areas, makes many decision makers reluctant to commit to a coal or wider fossil fuel phase-out.

- **Lack of political will to open markets, cooperate and realise regional synergies.** Opening markets and moving to cost-reflective energy tariffs is a major political difficulty in several countries. People are used to low, regulated prices and many cannot pay more, due to a vicious circle of energy inefficiency and energy poverty. Political barriers between certain countries clearly exist, but experience shows that national authorities can mostly cooperate with their neighbours when they want to, they just do not always prioritise it.
- **Political instability and lack of institutional capacity.** In countries like Montenegro, North Macedonia and Croatia, which are politically in favour of energy transition, a shortage of experienced staff at central and local government levels is emerging as an impediment preventing faster progress. It is also an issue in the other countries, but factors such as state control seem to play a stronger role at the moment.

Minor Drop in CO₂ Emissions in SE Europe

Overall, the SE European countries face significant hurdles in aligning with global net-zero ambitions, particularly in non-EU nations, where economic constraints, political challenges, and outdated energy infrastructures impede progress. Stronger international support and regional cooperation will be critical in overcoming these challenges.

More specifically, CO₂ emissions in SE Europe, a region comprising countries such as Romania, Bulgaria, Greece, Türkiye and the Western Balkans, are shaped by diverse factors, including energy reliance, industrialization, and transitioning economic structures, as analysed below.

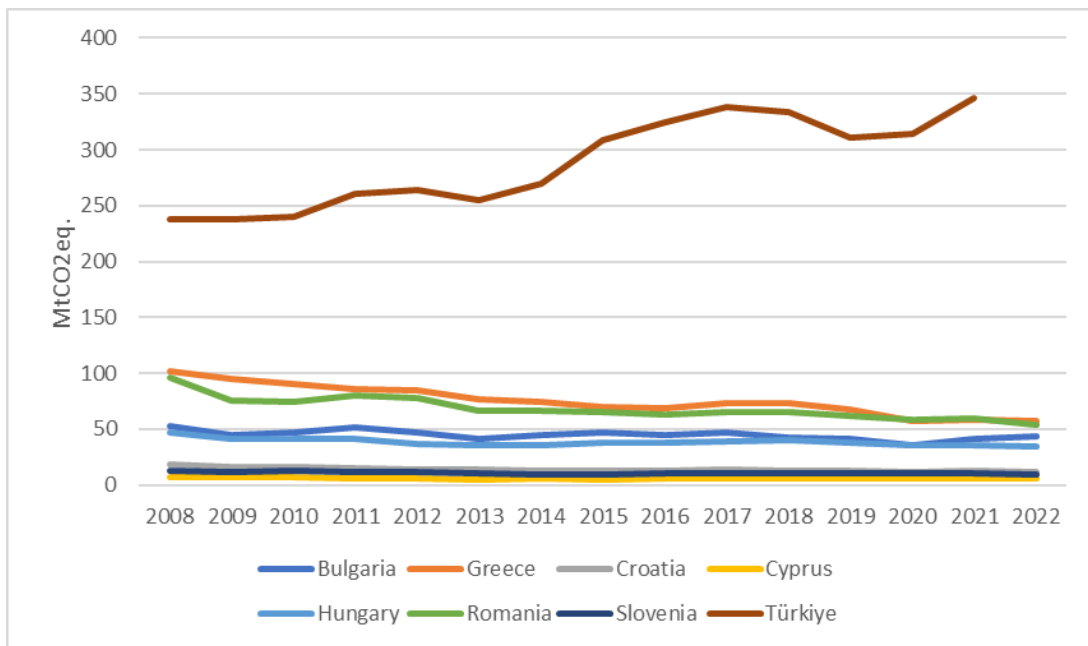
1. **Emission Trends:** Emissions in the SE European region show variation among countries, with EU member states like Greece, Romania and Croatia experiencing actual reductions due to compliance with EU climate targets.
2. **Fossil Fuel Dependence:** Many SEE countries remain reliant on coal and other fossil fuels for electricity generation, especially in the Western Balkans and Türkiye. This reliance has slowed progress in reducing emissions in non-EU SEE countries, where coal-fired plants continue to be dominant.
3. **Renewable Energy Transition:** EU-supported SEE countries have made notable progress in adopting renewable energy. For instance, renewables now contribute significantly to Greece's and Romania's energy mix, helping to cut emissions in these nations. However, non-EU nations in the region lag

behind due to limited investment in clean energy and weaker climate policies

- Sectoral Challenges:** Key sectors, such as energy production, transportation, and industry, contribute heavily to emissions. While the energy sector in EU member states has seen reductions through improved efficiency and renewables, the transportation sector remains a challenge across the region.

As Figure 1 shows, CO₂ emissions in SE Europe, including Türkiye, have decreased by only 0.8% over 2008-2021 (5). The decline has been mainly caused by the fall of CO₂ emissions in EU SEE countries, while the contribution of non-EU SEE countries is substantially lower. This can be also supported by the fact that several coal-fired power plants are currently in operation in the majority of the SE European countries, while Bosnia and Herzegovina and Türkiye are now planning to construct new ones, as shown in Table 1.

Figure 1: CO₂ Emissions in SE Europe, 2008-2022



Note: CO₂ emissions in Türkiye are not available for 2022.

Sources: ICE, Financial Times

Table 1: Coal-Fired Power Capacity (MW) in SE Europe, July 2024

Country/Area	Announced	Pre-permit	Permitted	Announced + Pre-permit + Permitted	Construction	Shelved	Cancelled (since 2010)	Operating	Mothballed	Retired (since 2000)
Albania	0	0	0	0	0	0	800	0	0	0
Bosnia and Herzegovina	0	1.050	0	1.050	0	650	3.500	2.090	0	0
Bulgaria	0	0	0	0	0	0	2.660	4.569	540	1.380
Croatia	0	0	0	0	0	0	1.300	217	125	0
Greece	0	0	0	0	0	0	1.250	2.885	0	3.053
Hungary	0	0	0	0	0	0	3.080	884	250	515
Kosovo	0	0	0	0	0	0	830	1.290	0	190
Montenegro	0	0	0	0	0	0	1.664	225	0	0
North Macedonia	0	0	0	0	0	0	730	824	0	0
Romania	0	0	0	0	0	0	5.705	2.310	645	4.780
Serbia	0	0	0	0	350	1.350	1.445	4.435	32	0
Slovenia	0	0	0	0	0	0	0	1.069	0	535
Türkiye	1.000	688	2.920	4.608	145	5.020	89.068	20.473	400	0

Source: Global Energy Monitor (6)

Discussion

COP29 has set a historic \$1.3trn climate finance goal by 2035, with a \$300 billion core target for developing countries. However, the transition to decarbonised power generation is not an easy global or regional issue, since electricity generation in several countries, which is mainly based on coal and lignite, supports thousands of jobs while it forms the basis of an extensive industrial base. Although all countries in the SEE region to a greater or smaller extent are committed to RES and energy efficiency programmes and specific targets, they are also pursuing a parallel carbonisation agenda as some coal-fired power plants are under construction or at an advanced planning stage.

The road to decarbonisation can be approached on two levels: (a) through policy addressing the energy mix and assessing the optimum rate of decarbonisation and investment in economic terms; and (b) through technology, whose penetration depends on the policies to be implemented and could contribute significantly towards decarbonisation. Good examples are the use of CCS/CCU or dual-fuel power plants, analysed by IENE in its “SE Europe Energy Outlook 2021/2022” study. (7)

The arduous and complex decarbonisation process in SE Europe is further burdened by a strong coal/lignite legacy and serious energy security issues. Rapidly increasing carbon prices and stricter EU regulations on air-polluters will bankrupt outdated lignite-fired power plants in the region over the next decade, making them politically untenable. Rising carbon prices will require ever bigger state subsidies for power plants, which is clearly not sustainable. Without such subsidies, fossil-based generation will make no economic sense. (8)

References

1. Wright, R. (2024), “COP29 ends with \$300bn a year deal but is it enough? 5 key takeaways from Baku”, <https://www.euronews.com/green/2024/11/25/cop29-ends-with-300bn-a-year-deal-but-is-it-enough-5-key-takeaways-from-baku>
2. United Nations (2024), “COP29 UN Climate Conference Agrees to Triple Finance to Developing Countries, Protecting Lives and Livelihoods”, <https://unfccc.int/news/cop29-un-climate-conference-agrees-to-triple-finance-to-developing-countries-protecting-lives-and>
3. IENE (2024), “COP29 UN Climate Conference agrees to \$300 bn per year finance deal to developing countries”, *IENE News Flash*, November 2024
4. Gallop, P. et al. (2021), “The Political Economy of Energy Transition in Southeast Europe – Barriers and Obstacles”, <https://library.fes.de/pdf-files/bueros/sarajevo/18313.pdf>
5. Eurostat (2024), “Air emissions accounts by NACE Rev. 2 activity”, https://ec.europa.eu/eurostat/databrowser/view/env_ac_ainah_r2_custom_13908137/default/table?lang=en
6. Global Energy Monitor (2024), “Coal Plants by Country”, https://docs.google.com/spreadsheets/d/1_6AkrRZOn3ZXhSV9O6tZnX-m7aJsfG9HiQ_iEqBkbW8/edit?pli=1&gid=1228809590#gid=1228809590
7. IENE (2022), “SE Europe Energy Outlook 2021/2022”, <https://www.iene.eu/south-east-europe-energy-outlook-2021-2022-p6560.html>
8. Stambolis, C. and Mezartasoglou, D. (2024), “Lessons Learned and Experiences Gained from Decarbonisation Policies in SE Europe”, https://www.iene.eu/media/Costis_Stambolis_Baku_.pdf

IENE SEE ENERGY BRIEF MONTHLY ANALYSIS - Issue No. 424 – ISSN:179-9163

Contributed by IENE’s Research Team

Monthly Analysis is published by the INSTITUTE OF ENERGY FOR SOUTH-EAST EUROPE (IENE)

3, Alex. Soutsou st. 106 71 Athens, Greece, T: +30-210 3628457, 3640278, F: +30 210 3646144, marketing@iene.gr, www.iene.eu

© 2024 Institute of Energy for South East Europe All rights reserved. No part of this publication may be reproduced, scanned into an electronic retrieval system, or transmitted in any form or by any means, including photocopying and recording, without the written permission of the publish.