

EPG

2023

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ANNUAL  
REPORT

EPG

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## Word from the President

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*2023 was a good year for EPG: we extended, diversified and strengthened our team, reaching 20 in-house researchers and associates; closed new partnerships with reputed international think-tanks, such as CATF, Third Way, and Reform Institute; and engaged in new policy research, with no less than 15 multi-annual European projects currently ongoing.*

*In navigating the complex policy landscape in the aftermath of the pandemic and energy crises of recent years, EPG has visibly intensified engagement with public authorities and the carbon-intensive industries, increasing the number of meetings, roundtables, and conferences, as well as policy reports, briefs, op-eds, interviews, and podcasts. The purpose has been not merely to better inform our policy work and customise our policy recommendations, but also to create useful communication channels between stakeholders, which we have deemed urgent in view of the profound upcoming changes brought by the Fit for 55 package.*





## Word from the President

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*As we continue our defining work on the energy sector, staunchly promoting renewables, power networks expansion and digitalisation, storage and energy efficiency, as well as transparent and competitive energy markets across the EU, we have made firm steps towards tackling the challenges of decarbonising Romania's carbon-intensive industries and its buildings sector, with widely acknowledged streams of work on industrial decarbonisation, carbon capture, utilization and storage (CCUS), and energy efficiency in buildings.*

*We have also published prominent work on climate policy and governance, including our first set of recommendations for a Romanian climate law, and investigated the social impact of climate mitigation technologies and policies. Our work remains fundamentally data-driven and our recommendations are informed by engagement with a wide range of stakeholders. Other sectors are in the offing, under the lodestar of offering evidence-based solutions for a fully decarbonised, yet competitive and fair economy.*

*Not least, at the end of 2023 we moved to new premises, to accommodate our growing team and make room for new colleagues to come. As we are nearing 10 years of existence, we trust that we will remain a mainstay in regional energy and climate policy analysis, with an increasingly recognisable European presence.*



President, EPG



## 2023 in numbers

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**25**

publications

**15**

ongoing  
projects

**15+**

events

**20**

researchers &  
associates

**7**

podcast  
episodes

## Outreach overview

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*In its ninth year of activity, EPG has continued to grow: in number of projects won and delivered, in number of experts who have joined our team, but also in diversity of deliverables we disseminate to provide solutions for a smooth decarbonisation of Romania and the CEE region. As a result of this growth, EPG's communications channels opened further more towards all relevant stakeholders.*

*Our commitment of creating bridges between the hard-to-abate industries and authorities has materialised in the EPG Stakeholder Platform for Romania's Decarbonisation, a one-of-a-kind initiative in Romania. Through continuous dialogue and four meetings organised all throughout 2023, we assured that the members of our platform, counting over 20 representatives of relevant industries, would have a voice in Romania's industrial decarbonisation policies.*

*As we understand that in this day and age the quality of deliverables is also determined by the timing of publication, EPG has adopted a new form of publication: quick reactions. This new tool in our dissemination kit delivers short, concise positions to timely events.*

*EPG's quick reactions, as well as our more thorough publications and podcast episodes are available on our **website**.*



*Caterina Oproiu*  
Communications Officer, EPG

## 2023 highlights

### Offshore Wind

**Offshore wind** power plays a key role in Europe's pathways to reducing dependency on fossil fuel imports and decarbonisation by 2050, in a moment when EU's energy security interests and climate objectives are fully aligned.



Panel discussion at the *Offshore wind – the enabler of Romania's decarbonisation* report launch, moderated by Mihnea Cătuți

The same goes for Romania, with a modelling exercise indicating that 15GW of offshore wind capacities need to be developed in its Black Sea waters by 2050, in order to achieve climate neutrality. This would become the country's largest source of electricity production, with more than 40% of total, in some scenarios.

The EPG report ***Offshore wind – the enabler of Romania's decarbonisation*** builds on results of the association's first **study** that estimated the technical potential of offshore wind in the Black Sea, proposing innovative solutions for overcoming grid-related challenges.

Backed by EU instruments, joint regional planning and joint development between Romania and Bulgaria, offshore wind in the Black Sea can kickstart and achieve the needed economies of scale to make offshore wind a major enabler of decarbonisation in Romania and Southeast Europe.

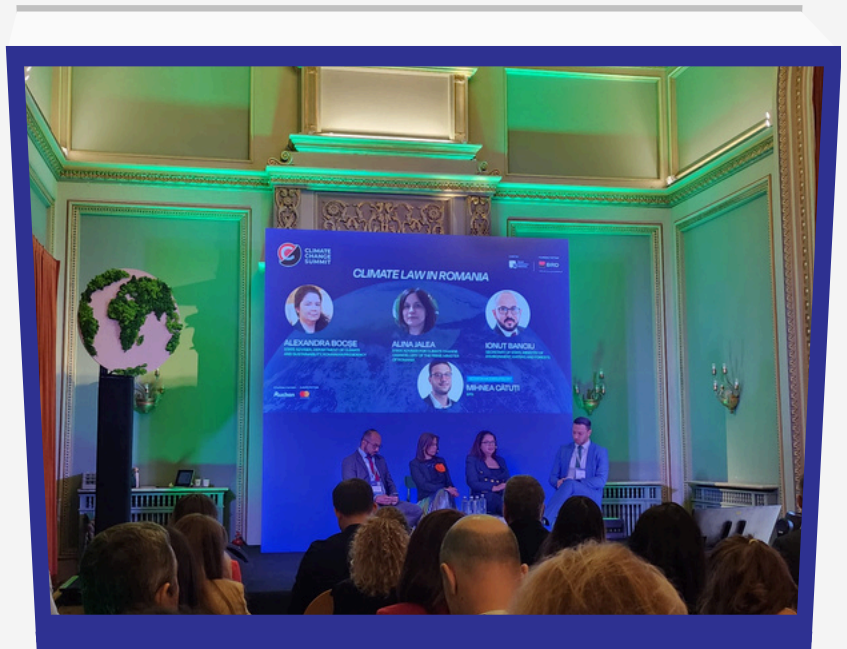
**Read the report [HERE](#).**

# 2023 highlights

## Climate Governance

Currently, Romania does not have a **climate framework law**. It relies mostly on transposed EU legislation to formulate targets and plans. Institutional responsibilities on climate change tend to be scattered, with insufficient coordination, weak accountability mechanisms, and a lack of long-term planning based on scientific evidence.

Despite these challenges, recent policy developments show that Romania can be proactive in elaborating climate policy. For example, the national coal phaseout law, passed in 2022, and the inclusion of an objective of climate neutrality by 2050 in the national long-term strategy (LTS). This momentum should result in setting Romania's climate objectives into law through adopting a national climate framework law.



High-level panel on the need for a climate framework law, moderated by Mihnea Cătuți, at the Climate Change Summit 2023

So far, 11 EU Member States have adopted climate framework laws, which legislate national emissions reduction targets and outline the mechanisms to achieve them in the long term. Climate framework laws vary greatly between countries but share some common core elements, such as long-term emissions reduction targets, internal coordination mechanisms, monitoring and reviewing systems, independent scientific advisory bodies and provisions for public participation.

Read the report [HERE](#).

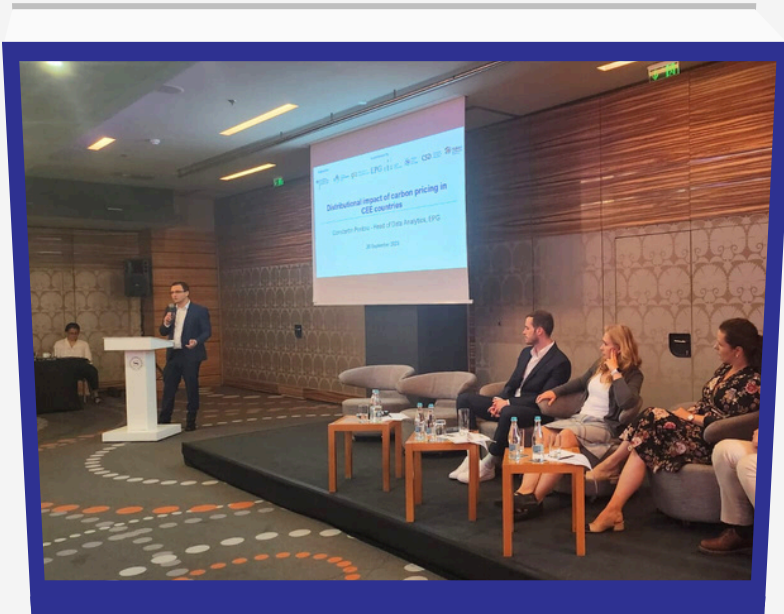


# 2023 highlights

## Carbon Pricing

**Carbon pricing** is widely seen as an effective policy option to pursue reductions in GHG emissions. Either through carbon taxes or emissions trading systems (cap and trade), carbon pricing reduces the negative externality of GHG emissions. By putting a price on emissions, economic agents can incorporate this cost in their investment, production, and consumption decisions. In time, this leads to lower emissions.

At the same time, this policy can have negative effects on the economy and households (especially the vulnerable ones), associated with the additional cost of emissions. Research shows that the negative effects can be alleviated or even reversed through revenue redistribution. To address this, the EU also adopted the Social Climate Fund, which uses part of the revenue collected by auctioning emissions allowances to finance investments in low-carbon technologies and support for low-income households.



Constantin Postoiu presenting the Distributional Impact of Carbon Pricing in Central and Eastern Europe at the launch event

The ***Distributional Impact of Carbon Pricing in Central and Eastern Europe*** report presents the results of a simulation model of a hypothetical carbon tax in Bulgaria, Germany, Hungary, Poland, and Romania. The macroeconomic impact is evaluated by calculating the effects of this carbon tax on GDP and employment by sector. At micro level, the focus is on households budget, namely on welfare losses across deciles and energy poverty, before and after revenue redistribution.

Read the report [HERE](#).

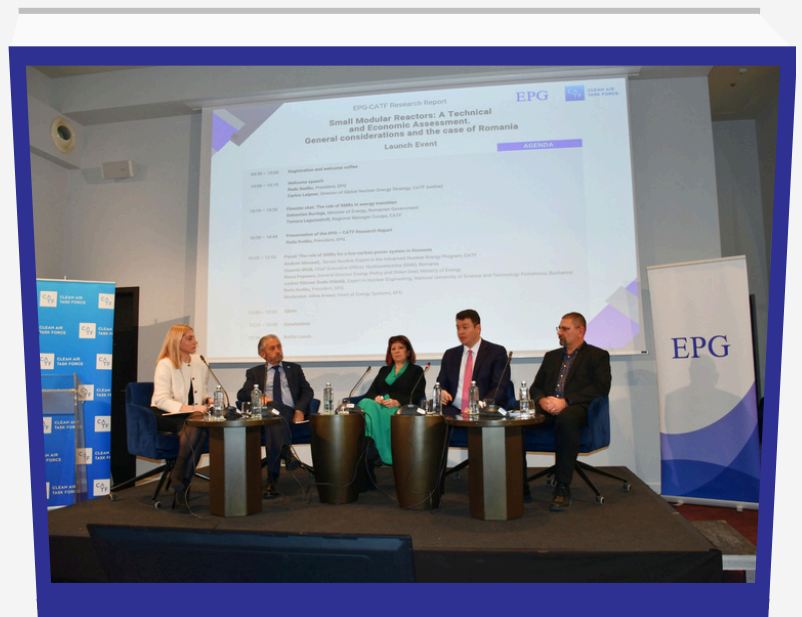


# 2023 highlights

## Small Modular Reactors

**Small Modular Reactors (SMRs)** represent the promise of a new nuclear technology to supply zero-emissions, safe, and dispatchable power, amid intensified efforts to reduce carbon emissions and ensure energy security. With small size and capacity and simplified design, modular and factory-made, SMRs are expected to supply new kinds of industrial consumers of electricity and/or heat – e.g., steel mills, aluminum smelters, chemical plants, off-grid mining, refining facilities, electrolyzers, and replacement of closing coal power plants.

SMRs will offer zero-emissions baseload (yet partly flexible) power to an energy system with an increasing share of variable renewables. They would be geographically more distributed, with smaller footprints, and much less dependent for cooling on water bodies than the large-scale nuclear power plants. And, importantly, they would cost notably less per MWh than new units of the latter sort.



Panel discussion at the EPG-CATF report launch, moderated by Alina Arsani

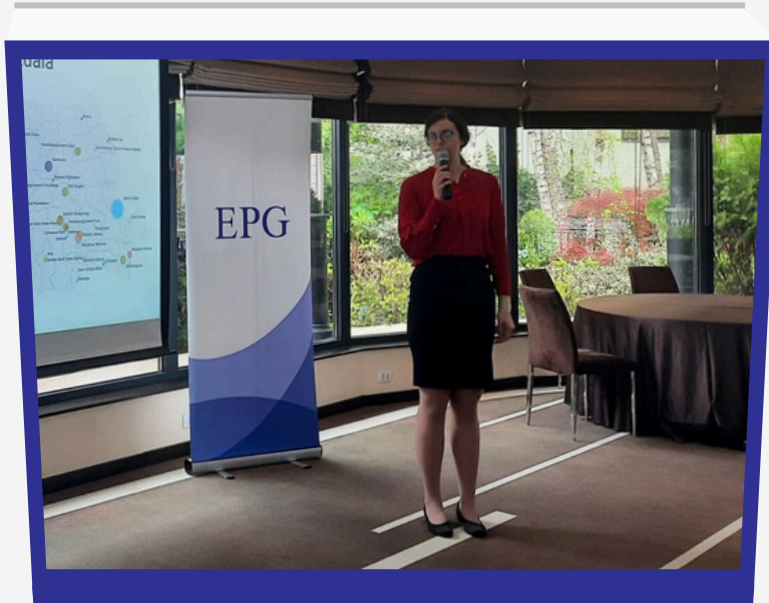
EPG and Clean Air Task Force published a joint research report ***Small Modular Reactors: A Technical and Economic Assessment***. General Considerations and the Case of Romania. The study offers a cautious endorsement for the development of the most viable SMR designs. SMRs may bring an important contribution to the intensifying efforts of reaching net-zero emissions by 2050, as well as to ensuring energy security and price affordability.

Read the report [HERE](#).

# 2023 highlights

## Romania's Industrial Decarbonisation

Romania's industry will need to transform fundamentally to align with climate commitments and remain competitive in a low-carbon world. With increasing pressure from EU policy and a race to decarbonise industrial production in the EU member states, there are progressively fewer windows of opportunity for implementing the new processes and technologies required for greening heavy industry. A fragmented national policy framework and a narrow fiscal space mean that Romania will face significant difficulties in keeping its industry competitive. However, it also has key advantages it can capitalise on to become a low-carbon industry leader.



Luciana Miu at the first meeting of EPG Stakeholder Platform for Romania's Industrial Decarbonisation

EPG's policy paper *The way forward for a low-carbon industry in Romania* highlights the main pathways for a quick, just and sustainable **industrial decarbonisation**, so that Romania achieves economy-wide net zero emissions by 2050. Three main areas of action must be addressed: industrial policy, funding and market creation, and infrastructure development. Massive investment, coordination within the state apparatus and with industry, and significantly more political engagement on the subject will all be required in Romania's decarbonisation.

This policy paper is based on extensive discussions with representatives of the Romanian hard to abate industries, within EPG's Platform of Industrial Stakeholders meetings. In this one of a kind initiative in Romania, EPG has committed to elaborate policy briefs based on gathered feedback from each stakeholder meeting, documents that are later presented to decision-makers.

Read the policy paper [HERE](#).

# 2023 highlights

## Hydrogen

With the adoption of the first law in Southeast Europe promoting clean hydrogen consumption in industry and transport and the development of a national hydrogen strategy, Romania has positioned itself as one of the most ambitious countries in the region for deploying this energy carrier. As shown in previous work by EPG, Romania has a good potential for producing hydrogen from electrolysis using renewable energy sources and it should slowly start developing hydrogen valleys, especially in the Dobrogea region.

However, uses of hydrogen should be carefully prioritised in applications where few alternatives exist and direct electrification is not possible. Some of the most promising uses (either directly or through alternatives carriers such as ammonia, methanol, or LOHC) with significant emission reductions, include steelmaking, fertilisers, chemicals, aviation, and some segments of long-haul transport.



Mihnea Cătuți at World Hydrogen Summit 2023, Rotterdam

The use of hydrogen in applications with more limited impact on emissions should be minimised, for example in household heating where heat pumps offer more promising solutions. EPG promoted these ideas in debates on national hydrogen legislation, the development of the hydrogen strategy, and in international conferences, including the World Hydrogen Summit.

EPG will continue its work on hydrogen over the coming years as part of two new Horizon Europe projects that will look at the potential of hydrogen liquification technologies at European level.

**Read EPG's newly published report on the matter [HERE](#).**



# 2023 highlights

## An nZEB school through *România Eficientă*

A second educational institution was modernised within EPG's programme, **România Eficientă**, which is supported by **OMV Petrom**. The modernisation process of the Liliești Secondary School in Băicoi, carried out as part of the România Eficientă programme, was finished in March 2023. This is the second educational institution in the country to have been modernised at almost zero energy consumption standards (nZEB). The first unit modernised through România Eficientă is the Elie Radu Energetic Technological High School in Ploiești.

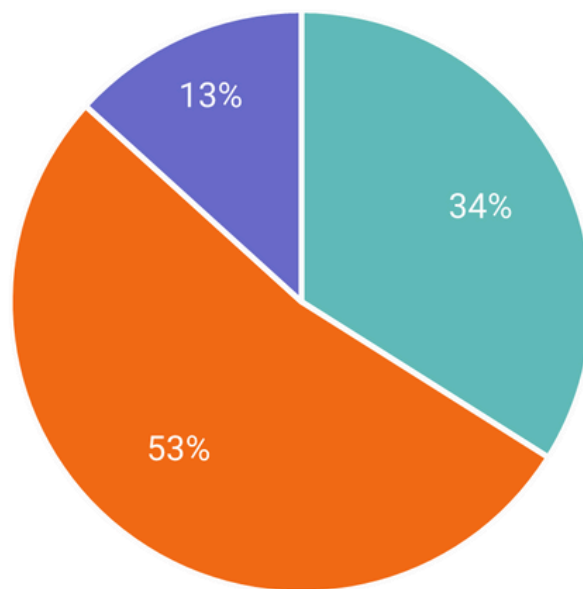
The modernisation of the Liliești school will generate an annual reduction of about 60% of the energy consumption for the thermal heating of the building.



## Financial Outlook

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### EPG Funding 2023



- Competitive public grants (Horizon Europe, EUKI and EEA and Norway Grants)
- Philanthropic organizations and foundations
- Private Sponsorship

**Total 2023 budget: €659,704.51**

## Looking forward: 2024

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### CCUS Observatory

**“CCUS Observatory”** is a watchdog project conceptualised by Luciana Miu, our Head of Clean Economy, to verify that emerging CCUS projects in the EU contribute sufficiently to the transition to net zero.

Commissioner Simson announced at the CCUS Forum in Aalborg that a CCUS Observatory will be implemented by the European Commission as a pilot project, conducted in cooperation with the European Parliament. The pilot project kicking off this year will monitor, report, and verify the CO<sub>2</sub> captured from cement and waste incineration plants. If successful, the upcoming pilot project could turn into a permanent EU CCUS Observatory for the whole carbon management value chain. EPG is extremely proud of Luciana's continued effort in promoting CCUS, which also resulted in her appointment to co-chair the European Commission's Working Group on Public Perception of CCS in 2023.

### Green Public Procurement

EPG embarks on a new project in 2024 to raise awareness of the role that green public procurement can play in accelerating the decarbonisation of energy- and emission-intensive industries such as steel and cement. Green public procurement can represent a key instrument for lead market creation, especially in Central and Eastern European countries such as Romania, where large scale infrastructure projects are being implemented as part of the EU's cohesion policy.



## Looking forward: 2024

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### Whole-Life Carbon

This new project tackles the issue of embodied emissions in the buildings sector, more specifically the whole-life carbon approach for emissions reductions. Embodied carbon in construction materials, as well as emissions from other non-operational phases of a building's life (such as construction and demolition) is a subject of increasing interest at EU level, and the recent revision of the Energy Performance of Buildings Directive (EPBD) outlines the first provisions for Member States to account for embodied emissions in their building-related emissions reduction measures.

Given the novelty of this topic in Romania, this project aims to inform decision-makers about the incoming transposition of the revised EPBD, with a focus on the implications of whole-life carbon obligations. Through desk research and stakeholder engagement, including bringing together representatives from across the building value chain, it will produce an analysis of existing barriers and propose policy recommendations for incorporating whole-life carbon into Romania's national policies for decarbonising its buildings stock.

### A decade of EPG

EPG's endeavors to provide and promote science-based solutions for the economy's decarbonisation become a 10-year journey in 2024. It is a journey that will not end soon, as Romania, as well as its neighbouring countries, face particular challenges on their path to a 2050 with Net Zero Emissions. Our anniversary year is full of new projects and horizons that we are eager to share with you. However, EPG's work remains continuous and consistent to advance a just and sustainable green transition, both in Romania and in the CEE region.

**Keep in touch with EPG's activities and publications!**

