EPH

Green Finance Framework

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1 EPH profile

Energetický a průmyslový holding, a.s. ("EPH" or "EPH Group") is a major European vertically integrated energy utility engaged in power and heat generation, gas transmission, gas and power distribution and gas storage. Its activities also include trading in commodities, retail supply of power and gas, and road and railway logistics. EPH has its principal operations in the Czech Republic, Slovakia, Germany, Italy, the UK, Ireland, France, Switzerland, and the Netherlands.

EPH is controlled by EP Corporate Group ("EPCG" or "EPCG Group") with Daniel Křetínský as the ultimate beneficial owner. A sister company of EPH is EP Energy Transition which currently includes the lignite operations in Germany under subsidiary LEAG. Despite being insulated from the wider EPCG Group, EPH perceives itself as part of the parent company and supports EPCG in implementing its own decarbonization strategy.

EPH, through its subsidiary EP Slovakia BV, has a strategic interest to own 66% in, and have management control over, Slovenské elektrárne, a.s. ("SE"), a major nuclear and hydro power producer. EPH continues to evaluate the call option agreed with Enel Produzione S.p.A. in respect of 50% shareholding in Slovak Power Holding B.V. ("SPH"), the controlling shareholder of SE, which, if exercised, would increase EPH's indirect shareholding in SE from 33% to 66% and significantly change the EPH Group's production source profile and lead to a notable decrease in its emission intensity. However, there is no guarantee that EPH will exercise the call option in the foreseeable future or at all. The failure to exercise the call option may prevent the EPH Group from gaining control over SPH and thus from implementing strategic decisions and achieving synergies that could otherwise benefit the EPH Group.

The chart below presents the prospective scope of EPH and other energy assets within EPCG Group following the expected changes in the ownership structure which include (i) transfer of MIBRAG Energy Group, a German lignite operator, from EPH to a sister company EP Energy Transition by the end of 2025, and (ii) increase of EPH stake in SE following the exercise of the call option described above.



EPH Group core business activities are organized into the following sub-holdings:

- EP Power Europe ("EPPE") focus on power generation mainly located in western Europe. Specifically:
 - EPPE operates a portfolio of flexible thermal power plants (13.8 GW of installed capacity) in western Europe (UK, Italy, Netherlands, France, Germany, Ireland) with the fuel mix dominated by natural gas 67% of the total installed capacity in gas, 26% in coal as of the year end 2023.
 - EPPE operates renewable generation assets comprising biomass plants, wind, and solar parks 6% share on the total installed capacity as of the year end 2023.
 - EPPE is engaged in mining of lignite in Germany through its subsidiary MIBRAG Energy Group. These assets shall be transferred outside of EPH into its sister company EP Energy Transition by the end of 2025. Lignite mined is largely used for consumption in power plants within the EPCG Group.
- EP Infrastructure ("EPIF") focus on gas midstream and downstream infrastructure, power distribution and district heating. Specifically:
 - EPIF controls the eustream a.s. ("Eustream") gas transmission pipeline, a multidirectional corridor with unique positioning to supply gas to Central European and Southern European gas markets, irrespective of the gas source and flows pattern (connected to all neighboring countries). Eustream transited 16.1 bcm of gas in 2023.
 - EPIF is an important gas distributor and electricity distributor in the Slovak Republic and an established operator of district heating infrastructure in the Czech Republic.
 EPIF distributed 45.5 TWh of gas, 6.0 TWh of power and supplied 7.4 PJ of heat in 2023.
 - EPIF holds the largest gas storage capacity in the region of Slovakia, Czech Republic, and Austria (41.6 TWh), and holds a significant share on the German market (19.9 TWh).
- Slovenské elektrárne ("SE"):
 - EPH directly holds a non-controlling stake (33%) in SE, a major power plant operator in Slovakia with focus on nuclear and hydro power generation (2.3 GW and 1.6 GW of installed capacity respectively). EPH continues to evaluate the call option in respect of 50% shareholding in Slovak Power Holding B.V., the controlling shareholder of SE, which, if exercised, would increase EPH's indirect shareholding in SE from 33% to 66%.
- EP Logistics:
 - Focus on rail, road, and intermodal transport, providing complex logistical services and solutions with principal operations in the Czech Republic, Slovakia, Poland, and Germany.

2 EPH's approach to sustainability

The EPH Group acknowledges the serious threat posed by human-induced climate change and is ready to play a major role in the transition to net-zero economy, while ensuring security and affordability of the supply of basic commodities. EPH fully endorses the EU's ambition to achieve climate neutrality by 2050, a cornerstone of the European Green Deal and in alignment with the goal of the Paris Agreement to limit global average temperature increase to well below 2°C above pre-industrial levels, while pursuing efforts to limit the temperature increase to 1.5°C. EPH is convinced that the development of the European energy system and the respective regulatory framework will continue to be guided by these long-term decarbonization objectives.

EPH aims to position itself as a key contributor to the energy transition. EPH has historically operated significant capacities of emission intensive assets and has already substantially reduced its carbon footprint through decommissioning or conversion of numerous coal power plants. In its emission

reduction efforts, EPH has not relied on merely disposing of the most emission intensive assets but focused on real decommissioning or replacement of those assets through sources with lower carbon footprint.

The position of EPH in the energy transition is relatively unique in the European context compared to other large energy groups. EPH has been oriented at thermal dispatchable power generation dominated by gas power plants. EPH is of the view that highly efficient CCGT and OCGT¹ power plants ready to be switched to hydrogen are a key enabler of the swift transition to the energy system based predominantly on renewables. This view is supported by Net Zero Emissions by 2050 (NZE) Scenario of IEA², according to which natural gas-fired capacity remains a critical source of power system flexibility in many markets, particularly to address seasonal flexibility needs.

EPH has developed a transition plan with clearly defined roles for each of its assets in a net zero economy which is described further below. The primary emphasis of EPH is to ensure that no investments are directed towards assets with the potential to lock in greenhouse gas emissions. Capital expenditures ("Capex") in the future shall be predominantly spent on assets with a clear roadmap away from natural gas to renewable gases.

3 Climate Transition Plan

EPH believes that its business model and strategy are compatible with the transition to a climate-neutral economy and limiting global warming to well below 2 degrees Celsius. This is reflected in EPH's science-based decarbonization targets aligned with the Below 2 Degrees pathway of the Transition Pathway Initiative ("TPI")³ which are supported by EPH's Climate Transition Plan. EPH's transition plan is an all-encompassing instrument that entails different elements of EPH operations in relation to strategy, policies, targets, action plans and resources.

The transition plan is embedded in EPH operational and financial processes, and as such embedded into business planning. This is supported by a disclosure profile that annually outlines the actions and resources supporting the implementation of the transition plan as well as the EU Taxonomy alignment. This aims to demonstrate the consistency of EPH transition plan with the EU Taxonomy objectives.

EPH strives to align its transition plan with the ESRS E1-1 reporting requirements from CSRD for a credible transition plan as outlined in the table below.

ESRS E1-1 (16 a-j) transition plan requirements ⁴	(§)	EPH Climate Transition Plan
a. GHG emission reduction targets	3.1	Science-based Paris-aligned targets in line with Below 2 Degrees pathway of the TPI (Scope 1&2). Scope 3 is currently being assessed (indicative overview of main Scope 3 sources is presented further below)
b. Decarbonization levers and key actions	3.2	Coal phase-out by 2030, fuel switch from coal to mix of gas- fired plants, waste to energy and biomass plants, ensuring readiness of gas-fired plants for hydrogen, reducing Scope 2 emissions through increasing reliance on zero-emission power
c. Financial resources needed for implementing transition plan	3.3	Dedicated resources for development of new hydrogen-ready CCGT / OCGT projects. Ongoing annual investments into power and gas distribution network to align them with net-zero energy future (details below)
d. Locked-in GHG emissions (coal exit)	3.4	Coal phase-out by 2030, ensuring hydrogen readiness across the gas midstream and downstream infrastructure, power plants, and cogeneration heating plants

¹ CCGT – combined cycle gas turbine; OCGT – open cycle gas turbine

² <u>https://www.iea.org/reports/net-zero-roadmap-a-global-pathway-to-keep-the-15-0c-goal-in-reach/executive-summary</u>

³ https://www.transitionpathwayinitiative.org/

⁴ https://finance.ec.europa.eu/news/commission-adopts-european-sustainability-reporting-standards-2023-07-31_en

e. EU Taxonomy alignment (Revenues, CAPEX, OPEX)	3.5	In 2022, 79% of EPH Capex was EU Taxonomy eligible, while 13% was fully aligned. Eligible capex primarily included development of 3 new-build hydrogen-ready CCGT/OCGT projects, which are in the construction phase. Whether these projects will meet all EU Taxonomy criteria is subject to further assessment.
f. CAPEX invested in coal, oil and gas	3.6	In 2022, coal-related Capex was limited to necessary maintenance (14% of total Capex), gas-related Capex represented mainly gas power plants (54%) and gas midstream and downstream infrastructure (9%). Gas-related Capex was spent largely on assets where future alignment with hydrogen is envisaged
g. EU Paris-Aligned Benchmarks (PAB Equity or Bond Index)	3.7	EPH is currently not part of Paris Aligned equity or bond indices
h. Embedding transition plan in overall business strategy and financial planning	3.8	EPH has fully integrated the transition plan into its overall business strategy as outlined below
i. Governance: management and supervisory bodies	3.9	EPH's transition plan has been approved by the EPH board of directors
j. Update on progress in implementing transition plan	3.10	EPH reports and monitors its progress on an annual basis

Building on this high-level outline of the EPH transition plan, the following sections display how each of EPH's segments is contributing towards the transition plan, EPH net zero goal and how EPH perceives the role of its assets in the energy transition and a fully decarbonized energy system.

3.1 Science-based GHG reduction targets: Transition Pathway Initiative (TPI)

The primary objective when developing the EPH Group's decarbonization goals and emission reduction pathways was to ensure alignment with scientific principles and the Paris Agreement's aim to limit global warming to well below 2 degrees Celsius, while pursuing efforts to limit the temperature increase to no more than 1.5 degrees. To achieve this, EPH aimed to align its pathway with pathways of the Transition Pathway Initiative ("TPI")⁵. TPI assesses companies' carbon performance against the modelling conducted by the International Energy Agency (IEA) for its biennial Energy Technology Perspectives report. This modelling is used to translate emissions targets made at the international level into sectoral benchmarks, against which the performance of individual companies can be compared. This framework is known as the Sectoral Decarbonization Approach. TPI uses 3 benchmark scenarios:

- 1.5 Degrees scenario, which is consistent with the overall aim of the Paris Agreement to hold "the increase in the global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels". This scenario is consistent with a carbon budget that limits the global mean temperature rise to 1.5°C with a 50% probability.
- Below 2 Degrees scenario, which is also consistent with the overall aim of the Paris Agreement to limit warming, albeit at the middle of the range of ambition. This scenario is consistent with a carbon budget that limits the global mean temperature rise to 1.65°C with a 50% probability.
- National Pledges scenario, which is consistent with the global aggregate of emissions reductions pledged by countries up to at least mid-2020, depending on the sector. According to the IEA, this aggregate is currently insufficient to put the world on a path to limit warming to 2°C, even if it will constitute a departure from a business-as-usual trend. This scenario is

⁵ Transition Pathway Initiative methodology

consistent with a carbon budget that limits the global mean temperature rise to 2.6°C by 2100 with a 50% probability.

The chart below compares the projected emission intensity of EPH Group with three TPI scenarios – (i) National pledges, (ii) Below 2 Degrees, and (iii) 1.5 Degrees. The intensity pathway projected by EPH for 2033 is in line with the Below 2 Degrees pathway.



EPH emission intensity projection (gCO₂/kWh)

Note: the depicted pathway (dotted line) is only indicative and represents an approximate linear interpolation between 2022 as a starting point, the 2033 intensity projection (125 gCO_2/kWh) and net zero goal in 2050 (0 gCO_2/kWh). EPH has not been formally assessed by TPI. EPH voluntarily uses the TPI pathways as a benchmark for its emission intensity target.

The transition plan of EPH is supported by decarbonization targets set for the medium-term and the long-term. These include:

- Reduce CO₂ emission intensity of its European power generation fleet in line with the Below 2 Degrees pathway of TPI by 2033 EPH aims to reduce its average emission intensity of its European power generation fleet in line with the "Below 2 Degrees" global pathway of TPI, implying the average Group intensity below 174 gCO₂/kWh in 2033. Based on EPH existing assets and planned projects, EPH projects the emission intensity to overperform this requirement and reach the intensity of 125 gCO₂/kWh in 2033, i.e. reduction by 66%. The intensity reduction will be primarily driven by complete phase-out of coal, reduction of full load hours of the gas power plants as they are expected to be increasingly used as a peaking source and increase in emission-free power from nuclear assets in Slovakia following commissioning of additional 1 GW of capacity (of which 0.5 GW already running). The difference between the EPH commitment of 174 gCO₂/kWh and the projection of 125 gCO₂/kWh serves as a room for further acquisitions or development of additional CCGT / OCGT plants in Europe.
- Phase out coal by 2030 EPH has a clear roadmap to phase out coal across its operations by 2030 at the latest, while striving to complete the coal exit earlier if viable. The remaining coal capacities to be operated by EPH beyond 2025 are solely represented by assets under mustrun regimes or assets which provide vital supplies of heat. EPH will dispose all coal mining activities already by 2025. The roadmap for the coal assets is presented further below.
- Achieve net zero operations in respect of Scope 1 & 2 emissions by 2050 In line with the "Below 2 Degrees" scenario, EPH aims to reduce emissions substantially towards 2040 and reach net zero operations by 2050. Full decarbonization of EPH operations depends on national strategies in individual countries. To reach net zero, EPH is committed to offsetting residual emissions in line with recognized practices such as biogenic energy carbon capture and storage or direct air capture.

- Reduce methane emissions in line with the Global Methane Pledge⁶ EPH operations include gas infrastructure bundled under its sub-holding EPIF where methane leakage is inherently present as long as it handles natural gas. These emissions represented 1.1% of total EPH greenhouse gas ("GHG") emissions in 2023. To address this footprint, EPH supports EPIF in its publicly announced goal to follow the objectives of the Global Methane Pledge announced at the COP 26 summit in November 2021. By joining the Pledge, participants commit to taking voluntary measures that will collectively contribute to reducing global methane emissions by at least 30% from 2020 levels by 2030.
- Scope 3 EPH is also already taking steps to enable a reduction of its Scope 3 emissions, including the upgrading of infrastructure that will support the delivery of hydrogen and renewable gases, the production of energy, heat/cool from these sources and supporting broader energy sector initiatives to scale up production. As a next step, EPH aims to enhance transparency and accountability with regards to Scope 3 emissions and intends to report on the Scope 3 emissions for 2024 in the first half of 2025. EPH presents an indicative overview of main Scope 3 emissions sources based on 2022 figures further below.

3.2 Decarbonization levers and key actions

These targets are supported by a long-term emission reduction pathway that has been developed for each generation asset. These asset-level pathways have been consolidated into a comprehensive pathway for the EPH Group. The key drivers of the emission intensity reduction between 2022 (baseline year) and 2023 (target year) are presented on the chart below:



EPH abatement curve by 2033 (gCO₂/kWh)

Below we describe the drivers of the abatement curve above in more detail:

1. Baseline carbon footprint of EPH (2022)

EPH Group produced 22.8 million tonnes of CO_2 emissions in 2022 (21.3 million tonnes in 2021) with intensity of 570 gCO₂/kWh (493 gCO₂/kWh in 2021). GHG emissions volume and intensity follow power and heat generation volumes as well as generation fuel mix.

Emission intensity is calculated including the heat component, as without this the performance of EPH cogeneration heating plants would be distorted. The heat component is however less significant compared to power (heat comprised 7% of energy produced in 2022).

The overall increase in CO₂ emissions volume and intensity in 2022 was primarily driven by the acquisition of Schkopau lignite power plant in Germany on 30 September 2021 and higher utilization of hard coal assets (Emile Huchet 6 and Mehrum) which were put back into operation at the behest of the German and French governments in order to ensure stability of the grid during the European energy crisis triggered by the Russian invasion in February 2022.

For the purpose of target setting, the baseline year (2022) emissions were restated to align with the prospective scope of EPH, considering the planned acquisitions and disposals. Specifically, production and emissions of EP Netherlands ("EP NL") (acquired in H1 2023) and SE (to be consolidated if and

⁶ <u>https://www.globalmethanepledge.org/</u>

when the call option is exercised) were included in the baseline year, while production and emissions of the MIBRAG Energy Group (planned to be disposed by the end of 2025) were excluded. The recalculation of the baseline year, resulting in the emission intensity of 364 gCO₂/kWh, is presented in the following table.

2022 baseline year calculation	Unit	EPH - reported	EP NL	SE	MIBRAG	EPH - restated
CO ₂ emissions	mt	22.8	2.7	1.3	(4.7)	22.1
of which unrelated to heat and power generation	mt	(0.1)	0.0	0.0	0.0	(0.1)
CO ₂ emissions from generation	mt	22.7	2.7	1.3	(4.7)	22.0
Power produced	TWh	37.0	7.4	17.0	(4.1)	57.3
Heat produced	TWh	2.8	0.0	0.6	(0.3)	3.1
Total energy produced	TWh	39.7	7.4	17.7	(4.4)	60.4
CO ₂ emission intensity	g/kWh	570	368	74	1,076	364

Recalculation of the 2022 emission intensity for the target-setting

Scope 1

EPH's direct CO₂ emissions originate from combustion of hard coal, lignite, natural gas, other fossil fuels and municipal waste in the power plants and cogeneration heating plants, combustion of gas in the compressor stations as part of the gas midstream infrastructure, operation of vehicles owned by EPH Group entities, and other combustion of gas, diesel, or heating oil in ancillary technologies. More than 99% of the direct CO₂ emissions are externally verified by a certified third party at the asset level as these emissions fall under the EU Emissions Trading Scheme (ETS). Starting in 2023, these emissions are also verified at the EPH holding level by a big 4 auditor in line with ISAE 3000.

More than 99% of Scope 1 CO₂ emissions result from power and heat generation (22.7 million tonnes in 2022). The key levers to reduce these emissions are presented above on the abatement curve and described further below. The remaining emissions mainly comprise gas combusted at compressor stations adjacent to the gas transit and storage infrastructure, where the compressor fleet shall be partly electrified, while renewable gases are envisaged to be used in the remaining gas turbines.

EPH's direct methane emissions arise from the leakage of natural gas from its gas networks and storage facilities (232 thousand tonnes of CO_2 equivalent in 2022). EPHs' methane emissions are categorized into three activities: (i) fugitive emissions - unintentional gas leaks from the pipelines, (ii) venting - intentional release of gas for the purpose of repair and maintenance of pipes and compressors, and (iii) incomplete combustion - gas that is emitted due to its improper combustion within compressors. The key measures to reduce the methane emissions are:

- Robust Leak Detection and Repair program in place
- Gradual replacement of steel pipes at the gas distribution network with impermeable polyethylene pipes
- Elimination of venting to the maximum extent feasible, which is supported by EU legislation effectively banning routine venting in the medium term

The calculation methodology for methane emissions differs depending on the specific business activities (transit, distribution, storage) and is aligned with internationally recognized methodologies.

Scope 2

Scope 2 emissions (160 thousand tonnes of CO_2 equivalent in 2022), mainly associated with the following key categories:

- Purchased electricity to cover the network losses in the power distribution network operated in central Slovakia.
- Purchased electricity for lignite mining technologies.
- Purchased electricity to power electric compressors and other technology as part of the gas midstream and downstream infrastructure.

- Purchased electricity to power the pumping stations at the district heating networks.
- Purchased power to cover own technological consumption of power plants.
- Purchased electricity and heat to cover consumption of administrative and other buildings.

Scope 2 emissions are calculated using the location-based method where the volumes of power and heat purchased for own consumption are multiplied by average emission intensity of the grid in the respective country.

As part of the commitment to net zero, EPH anticipates a substantial reduction of these indirect emissions by 2040, with complete elimination by 2050, achieved through gradual decarbonization of the power grid in the respective countries and direct sourcing of zero-emission power.

Scope 3

EPH strives for transparency regarding the impact of its operations throughout the entire value chain, starting from suppliers and extending to the end use of commodities. However, at present, EPH does not disclose its Scope 3 emissions. EPH is committed to publishing its Scope 3 emissions as part of its regular disclosure starting in the first half of 2025 (covering the year 2024).

EPH is currently in the process of identifying sources of Scope 3 emissions. Based on preliminary assessment based on the 2022 figures, these are the main sources of Scope 3 emissions:

- Gas transited, stored, and distributed through EPH infrastructure while the guidance on inclusion of these sources is not clear in the GHG Protocol, EPH aims to follow the methodology of the Science Based Targets initiative and include these emissions. Based on volume of gas transited, distributed, or stored in EPH infrastructure in 2022, Scope 3 emissions resulting from the end use of gas amount to approximately 60 million tonnes of CO₂ equivalent, representing the key source of Scope 3 emissions within EPH Group.
- Lignite mining through its subsidiary MIBRAG Energy Group, EPH mined ca 16.5 mt of lignite in 2022, which was partly consumed within the Group and partly sold to companies outside of EPH. The volumes of mined lignite declined significantly in 2023 to 12.0 mt.
- Power and gas supplied to end consumers as a retail power and gas supplier in the Czech Republic, Slovakia, and France, EPH supplied 21 TWh of power and 8 TWh of gas to end consumers in 2022.
- Hard coal trading EPH is involved in trading with hard coal, partly for consumption within own coal fleet, partly sourced for external customers.

EPH undertakes several activities to reduce its Scope 3 emissions by efforts to accelerate the adoption of renewable gases. EPH is already in the process of transforming its infrastructure as can be demonstrated by:

- Enabling suppliers of renewable gases such as biomethane to deliver gases to the end consumers through the EPH's distribution network.
- Demonstrating flexibility and technological readiness to accept other renewable gases such as hydrogen, initially at lower blends.

In doing so, EPH ensures that once sufficient sources of hydrogen and other renewable gases are available, EPH can accommodate the supply in support of the energy transition.

EPH has less direct influence on the availability of hydrogen and other renewable gases given its role in the value chain. Having said this, EPH does make an effort to support the broader ecosystem in the decarbonization agenda through partnerships and initiatives to support the scale-up. Eustream, SPPdistribúcia ("SPPD") and NAFTA a.s. ("Nafta") all play a role in supporting the development of interconnected energy systems in Europe, including its adaptation for hydrogen.

2. Coal phase-out

EPH has a clear coal exit plan for its power plant fleet which respects local legislation and requirements of the grid. The projected installed capacity is illustrated on the following chart.



Projected capacity in coal (GW)

3. New nuclear units

EPH holds 33% equity share in ("SE"), an operator of 2 nuclear power plants and several hydroelectric plants in Slovakia. EPH continues to evaluate the call option in respect of 50% shareholding in Slovak Power Holding B.V., the controlling shareholder of SE, which, if exercised, would increase EPH's indirect shareholding in SE from 33% to 66%. Since 2022, SE has already commissioned additional unit Mochovce 3 in one of its nuclear power plants, increasing the capacity by 440 MW. Another unit with the same capacity Mochovce 4 is planned to be commissioned by the end of 2025. As a result, the emission-free output from nuclear plants is expected to increase from 15 TWh in 2022 to 23 TWh in the future. Please note that nuclear power plants are not included as eligible assets in the Use of Proceeds section in this Framework (as defined below).

4. Hydrogen-ready power generation CCGT / OCGT

Through its power generation assets EPH contributes to the energy transition of the countries it is active in. Driven by the coal phase-out and the country specific transformations to renewable energy systems, the need for alternative low-carbon dispatchable power generation is created. The coal phase-out in most countries will be completed by 2030 resulting in an increased reliance on renewables and lowcarbon alternatives. To ensure security of supply, countries will need to reinforce dispatchable power generation capacities, where gas power plants are well positioned as a highly flexible source. Alternative solutions such as battery power and hydroelectric power plants will play an important role in the broader transition but lack the suitability for bridging longer time periods, while hydroelectric plants also have limited build-out potential.

As such, significant capacities of gas power plants to provide dispatchable power generation will have to be made available to facilitate the transition away from coal. This shall enable accelerated phase-out of solid fossil power generation (coal) while transitioning to lower carbon thermal power generation (gas power plants), that eventually can be converted to carbon neutral power generation (hydrogen power

plants). However, the renewable gases (hydrogen, biomethane) and technologies (CCS) to transition these assets to carbon-free power production might not be economically available or not available at all for all power plants in the coming years. Therefore, gas power plants need to be upgraded to or built as hydrogen-ready while operating on natural gas until renewable gases or CCS technology are sufficiently available.

EPH is in the advanced development stage of three hydrogen-ready gas power plants: the Kilroot OCGT plant with a capacity of 700 MW in the UK, the Tavazzano CCGT plant with a capacity of 800 MW, and the Ostiglia CCGT plant with a capacity of 880 MW in Italy. Additionally, EPH is considering an investment in the Eggborough CCGT plant in the UK with a capacity of 1,700 MW, along with 299 MW of battery storage. This project is still subject to the final investment decision. All projects are supported by capacity contracts awarded for 10-15 years.

5. Reduced full load hours of existing gas power plants

With growing penetration of renewables, the utilization of dispatchable gas power plants is expected to decline. After coal generation sources are phased out, gas power plants will be the last in the generation merit order, depending on their generation efficiency. By default, keeping those assets operational is not detrimental to the build-out of renewables which will always be fully utilized given their virtually zero marginal costs. Conversely, flexible gas power plants are a vital enabler of the acceleration of renewables ramp up. EPH projects to reduce full load hours ("FLH") of the power plants based on the efficiency of respective power plants and their useful lives.

6. Renewables

EPH's role in the energy transition is currently centered around flexible power with significant focus on natural gas, while ensuring hydrogen readiness. EPH currently does not have tangible plans to be heavily engaged in the development of renewables. Within the broader EPCG Group, the development of renewables, primarily in Germany, shall be realized by EPH's sister company, EP Energy Transition. Consequently, in EPH's abatement curve, the increased output from renewables plays a relatively minor role.

7. Green gases

According to the net zero by 2050 report by IEA⁷, hydrogen and hydrogen-based fuels are recognized as a crucial pillar for achieving decarbonization goals. The report highlights the need for rapid expansion of low-carbon hydrogen in various sectors such as power generation, hard-to-abate industries, aviation, shipping, or long-haul road transport. In the Climate Change 2022 report by IPCC⁸, supplying the energy system predominantly with renewable power will require a broad portfolio of balancing mechanisms, including electrolytic hydrogen.

The EU Impact Assessment Report⁹ on regulation pertaining to renewable gases indicates that the overall consumption of gaseous fuels is projected to undergo only a minor decline until 2050, with approximately 85% of current gas demand expected to persist. However, the composition of these fuels will undergo a significant shift, with biomethane, synthetic methane, and hydrogen gaining increasing prominence, while fossil methane may still have a limited role in a net-zero world, potentially in conjunction with carbon capture, utilization, and storage (CCUS) technology.

EPH is aware of the temporary role of natural gas in the energy transition and envisages converting its assets away from natural gas to renewable gases once these are available on a commercial scale. The sections below describe roles of EPH power plants in decarbonization strategies in the countries where EPH operates its gas fleet.

⁷ <u>https://www.iea.org/reports/net-zero-by-2050</u>

⁸ https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_SPM.pdf

⁹ https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=SWD%3A2021%3A455%3AFIN&gid=1639998727689

8. Role of gas in the power sector

Italy (EP Produzione)

Italy has set emissions reductions and energy efficiency targets in its National Energy and Climate Plan for 2030. However, it will need to make substantial additional efforts to meet the ambitious targets for 2030 stemming from the (draft) European Union's Fit-for-55 package. One of the challenges for Italy is the considerable regional disparity between renewable electricity generation and load centers. Dispatchable renewable sources (hydro and bioenergy) are far more present in northern regions than in southern ones, which have a dominant share of variable sources (solar and wind)¹⁰.

These territorial disparities complicate the management of electricity flows along the national transmission and distribution grids. Italy has already made substantial progress in the development and deployment of system flexibility and smart grid solutions, including the installation of smart meters, but a higher penetration of renewables will require greater transmission, distribution, and storage capacity.

The transmission system operator Terna has identified that to enable coal phase-out in Italy, around 3 GW of new gas capacity is needed. Development of these capacities is supported through a capacity market.¹¹

EPH is currently in advanced development phase of two hydrogen-ready CCGT plants Tavazzano and Ostiglia which are planned to be commissioned in 2024 and 2025 respectively. These will complement the already existing fleet of 3 CCGT and 1 OCGT plants operated by EPH in Italy. All plants can be retrofitted to adopt hydrogen blends which can be reasonably expected in the gas transit network in the foreseeable future.

Netherlands (EP NL)

The Dutch government has set strong decarbonisation ambitions for an almost decarbonised power system by 2040 (-95%)¹². These strong ambitions are supported by the Dutch Government Strategy on Hydrogen¹³. Currently, natural gas is arguably the most important energy source in the Netherlands. In 2022, natural gas accounted for 39% of electricity generation and 37% of total primary energy supply¹⁴. However, Dutch energy policy is pushing to rapidly reduce the role of gas in the energy system to support the transition to a low-carbon economy and to protect public safety in relation to earthquakes caused by gas production.

The national strategy foresees that gaseous fuels will remain crucial in the energy system which is robust, flexible, and also affordable. The Dutch government recognizes the need to produce gases using zero-carbon methods. While natural gas will be an important part of the energy system in the foreseeable future, renewable gases will play a critical role in transitioning to a carbon-neutral energy system. Given the currently limited availability of hydrogen and the expected increasing demand from industry and mobility, the actual large-scale deployment of hydrogen in power plants is likely to take place only after 2030. Thereforer, gas-fired power plants will continue to be needed after 2030 as a controllable capacity for security of supply.

In the Netherlands, EPH operates a fleet of four CCGT power plants with a combined capacity of 2.6 GW. One of these facilities is expected to reach the end of its useful life before 2030, while the other three are projected to operate until sometime between 2030 and 2040. This fleet is well positioned to contribute to the Netherlands decarbonization objectives by providing dispatchable power to support increasing share of renewable energy sources. More significant extension of their operational lifespans would be conditioned on compliance with the Dutch decarbonization goals which foresee conversion of such plants to utilize carbon-neutral gases.

¹⁰ Italy 2023 – Analysis - IEA

¹¹ https://commission.europa.eu/publications/italy-draft-updated-necp-2021-2030_en

¹² <u>https://commission.europa.eu/publications/netherlands-draft-updated-necp-2021-2030_en</u>

¹³ Dutch Government Strategy on hydrogen

¹⁴ https://www.iea.org/data-and-statistics/data-tools/energy-statistics-data-browser

United Kingdom (EP UKI)

The UK government has set an ambitious goal to fully decarbonize the power sector already by 2035. Besides massive deployment of wind and solar and ongoing investments in nuclear reactors, the UK recognizes the important role of hydrogen and CCS in the zero-carbon power sector. The government also acknowledges the vital transitional role of UK oil and gas, contributing to its energy independence.¹⁵

EPH supports the government's target to safeguard security of supply, with efficient existing and new gas power plants in the UK. The UK Hydrogen Strategy expects between 0-10 TWh of hydrogen in power production by 2030 – reflecting the uncertainty of hydrogen availability. EPH prepares its new-build power plants to be ready to run in a decarbonized energy system. This is underlined by the hydrogen-readiness of new-build plants at Kilroot and potentially at Eggborough where the project is still subject to the final investment decision. As soon as hydrogen is economically available, it can be used in EPH's UK power plants, potentially in line with the national plans to have the electricity system decarbonized already by 2035. Additionally, biomethane can be used as transitional green fuel, since it is easier to integrate in existing plants.

Czech Republic

Due to its significant dependence on lignite, build-out of new gas capacities is considered as the vital step to enable coal phase-out by 2033 as intended by the incumbent Czech government. According to the Czech National Energy and Climate Plan¹⁶, in addition to the construction of new renewables, there will be a need to strengthen the grid's capacity and to investigate and deploy various flexibility measures. Natural gas will also temporarily play an enhanced role.

Through its subsidiary EPIF, EPH operates district heating networks and adjacent heating plants in the Czech Republic, supplying heat to approximately 153,000 customers in major regional cities. Cogeneration heating plants operated by EPH in the Czech Republic do not only serve as vital heat suppliers but also provider of grid balancing services to the Czech transmission system operator.

Owing to higher cogeneration efficiency, the heating plants are well positioned to comply with the substantial contribution criteria of the EU Taxonomy. As part of the EU Taxonomy alignment in its own green finance framework¹⁷, EPIF is committed to ensuring technical readiness of the gas turbines for renewable gases by 2035 if these are available on a commercial scale. As EPIF's influence on the development of the market with renewable gases is peripheral, EPIF's commitment needs to be perceived as a commitment to technical readiness to combust renewable gases, while the actual deployment is subject to development of the hydrogen market. EPIF shall contract technologies readily available to combust certain proportion of hydrogen from the outset (approximately 15% by volume).

Adaption of the gas turbines for hydrogen combustion involves relatively limited adjustments, such as replacement of the gas burner. While adjustment of the turbines to 100% hydrogen is also technically feasible, EPIF perceives as more likely to complement hydrogen with biomethane which has similar characteristics as natural gas. EPIF considers these technologies not only as a medium-term solution to replace coal and reduce emissions quickly but also as a long-term solution to provide zero carbon dispatchable heat and power generation sources and to limit the usage of natural gas only to the transitional period.

9. Transition plan in non-generation segments

EPH's existing gas transmission and distribution infrastructure can be retrofitted to support hydrogen, while the gas storage assets are also evaluated to assess its hydrogen compatibility. To this end, EPH has already launched hydrogen-dedicated research and development projects. The unique, geographically strategic position for future hydrogen transmission further positions EPH to be a major player in hydrogen adoption.

¹⁵ <u>https://www.gov.uk/government/publications/powering-up-britain</u>

¹⁶ https://commission.europa.eu/publications/czech-draft-updated-necp-2021-2030_en

¹⁷ https://www.epinfrastructure.cz/en/sustainability/green-finance-framework/

Ongoing initiatives, such as the EU Hydrogen Backbone and the Central European Hydrogen Corridor, underscore the necessity of establishing adequate infrastructure for the transport and storage of this diverse mix of gases. This entails refurbishing existing infrastructure to the extent possible to minimize Capex requirements, as well as developing new infrastructure to bridge any gaps. One prospective model for the future could involve the establishment of two parallel infrastructures: one dedicated exclusively to 100% hydrogen and another one for methane (comprising biomethane, synthetic methane, fossil methane, and potentially blended with hydrogen). These two systems could mutually support each other, with hydrogen potentially being converted to synthetic methane or vice versa, depending on the balancing needs of individual networks.

To address significant disparities between projected hydrogen production and consumption across various regions in Europe, the establishment of a robust hydrogen transit and storage infrastructure is imperative. This infrastructure should not only connect regions within Europe but also neighboring regions with abundant hydrogen potential, such as North Africa or Ukraine. A robust infrastructure shall ensure the security of supply for future hydrogen off-takers, as well as the security of demand for potential investors in hydrogen generation. And the costs of refurbishment of the existing infrastructure is relatively modest compared to development of a new dedicated pipeline. Therefore, utilization of existing gas transit and storage infrastructure will be crucial to ensure interconnectedness of the energy markets at acceptable costs.

Gas and hydrogen distribution

As a monopoly distributor of natural gas in Slovakia, EPH's subsidiary SPPD plays a pivotal role in ensuring a reliable supply of gas, which is considered a low-carbon transitional fuel that facilitates the integration of renewable energy sources. Recognizing the need to eventually replace natural gas with zero-carbon alternatives, EPH's decarbonization efforts are focused on two key areas:

- Reducing methane leakage to ensure emission reduction already during the transitional period.
- Preparing the network for the distribution of hydrogen or other renewable gases to ultimately abandon natural gas.

EPH considers distribution of hydrogen as instrumental in decarbonizing various sectors, including hard-to-abate industries such as steel manufacturing, heavy transportation (shipping, aviation, long-haul trucks), dispatchable power generation, or fertilizer production. SPPD acts as a facilitator for the interaction between producers and potential end consumers of hydrogen, particularly large industrial entities seeking viable solutions for decarbonization.

Major actions undertaken by SPPD are:

- Reinforcement of its Leak Detection & Repair (LDAR) program. SPPD has increased the frequency of leak surveys in recent years, reducing the methane emissions by 25% between 2020 and 2022. SPPD applies a risk-based approach for conducting leak detection surveys, prioritizing more frequent inspections of the network's most susceptible areas. SPPD uses innovative technologies such as drones to inspect inaccessible areas or in-line sensors to conduct internal pipeline inspections.
- Ongoing replacement of older steel pipes with those made of polyethylene. This material possesses superior permeability characteristics, making it suitable for the potential distribution of pure hydrogen. In the interim period, when fossil natural gas is still being distributed, polyethylene pipes serve as a reliable barrier against methane leakage.
- Testing lower blends of hydrogen in the existing infrastructure. In 2022, SPPD successfully completed a pilot project in which 10% of hydrogen was blended into the gas distribution network in a small village in Slovakia. This project aimed to test the interaction of the networks, as well as the performance of appliances such as boilers and cookers at households and commercial customers.
- Enabling the integration of biomethane stations with the network. Additionally, SPPD manages the renewable gases registry, providing biomethane producers with guarantees of origin. These

guarantees can be purchased by gas consumers aiming to reduce their carbon footprint in their operations.

Substantial portion of the Capex spent by SPPD in the future will be oriented towards ensuring feasibility of full hydrogen adoption:

- In local low-pressure networks, polyethylene pipes are now the default choice for replacing old steel pipes. By the end of 2022, polyethylene pipes accounted for 59% of the total length of the local networks (more than 15,000 km out of the total length of approximately 27,000 km of low & medium pressure pipes). While SPPD had been replacing around 140 km of aging steel pipes annually in recent years, the organization is striving to increase the replacement rate to approximately 200 km per year by 2030 and further accelerate it to 300 km per year beyond 2030. The key objective is to convert the entire low- and medium-pressure pipeline to polyethylene.
- While the high-pressure network cannot be converted into polyethylene, hydrogen compatibility is ensured through appropriate steel grade and management of the operating pressure. All newly replaced high-pressure pipes are fully hydrogen aligned.
- At pressure reduction stations, certain components need to be replaced or retrofitted to enable proper functioning. To ensure compatibility with 100% hydrogen distribution, a full replacement of the reduction stations might be necessary to increase their capacity accordingly and accommodate the same amounts of energy as hydrogen has lower volumetric density compared to natural gas.
- Current metering devices are partly ready for measurement of 10-20% hydrogen blends. Full replacement of the meters will be required for accurate measuring of 100% hydrogen.

Gas and hydrogen transmission

In accordance with the EU regulation on renewable and natural gases, including hydrogen, all gas transmission system operators will be required to accept gas flows with a hydrogen content of up to 2% by volume at interconnection points between EU member states in the natural gas system.

The necessary adjustments at the Eustream network are primarily expected to involve the replacement of metering equipment and other components of the network. Eustream's pipeline system is also strategically positioned to facilitate the transit of pure hydrogen. With four to five parallel pipelines in place, it is well-suited for potential simultaneous transport of methane and pure hydrogen in a dedicated line in the future. This underscores Eustream's commitment to ensuring safe and efficient transport of hydrogen, in compliance with regulatory requirements and industry best practices.

Eustream's plan to enable the international transmission of clean hydrogen was granted the Important Projects of Common European Interest (IPCEI) status in February 2024. This marks a significant milestone in our long-term efforts to facilitate the supply of clean hydrogen to European markets and accelerate the decarbonization of Slovak industry. Obtaining IPCEI status opens a realistic way for securing grants from national or EU sources, moving the whole project closer to realization.

Gas and hydrogen storage

Nafta, a major operator of gas storage facilities in the CEE region, intends to initiate a project with the objective of identifying suitable sites for the storage of hydrogen blended with natural gas, as well as determining the maximum achievable concentration that can be stored within a porous geological structure. To this end, Nafta has launched project Henri, which has been endorsed as one of the initial Important Projects of Common European Interest (IPCEI) in the domain of hydrogen. Nafta consistently evaluates possibilities for storing alternative gases within its current gas storage facilities. When it comes to storing hydrogen, however, the porous structures operated by Nafta present greater challenges compared to salt caverns.

3.3 Financial resources needed for implementing the transition plan

EPH expects to incur the following Capex related to the actions described above:

 Development of 2.4 GW of new CCGT / OCGT power plants in the UK and Italy which are already in the construction phase – ca EUR 1.1bn

- Replacement of lignite heating plants in the Czech Republic through CCGT units and waste incinerator plants ca EUR 1.3bn of gross Capex, of which approximately 55% expected to be covered by investment subsidies from the Modernization Fund
- Gradual refurbishment of the gas distribution network with hydrogen-aligned piping approximately EUR 33m invested in hydrogen-ready pipes in 2023 when the rate of replacement was approximately 140 km/year. This rate is planned to accelerate to 200 km/year after 2025 and 300 km/year after 2030
- Reinforcing the power distribution network for higher share of intermittent renewable sources ca EUR 60m invested in 2023
- Capex in the gas transit and storage segments is subject to further technical assessment and development of commercial market with hydrogen. In both segments, EPH is active in ensuring hydrogen readiness through involvement in projects which are largely funded by EU grants and have been assigned the status of IPCEI projects

3.4 Coal exit (avoiding locked-in GHG emissions)

EPH has a clear roadmap to phase out coal across its operations by 2030 at the latest, while striving to complete the coal exit earlier. Some of the closed coal power plants will be converted to sources with lower carbon footprint, like gas or biomass, while others will be gradually closed or spun-off into a separate entity outside of EPH Group. Beyond 2025, the remaining coal capacities within EPH shall be solely represented by the Fiume Santo power plant on the Sardinia Island operating under a must-run regime and cogeneration plants in the Czech Republic which provide vital supplies of heat.

Czech Republic

EPH has a clear decarbonization roadmap in place for all entities which are bundled under EPIF. EPH supports EPIF in its ambition to convert all assets away from coal to a balanced mix of CCGT units, waste-to-energy plants, and biomass units by 2028/2029.

The current fuel mix of the heating plants is primarily lignite-based, comprising approximately 86% share in 2022, and is supplemented by biomass and municipal waste as complementary sources. In an increasingly decarbonized world, EPIF anticipates that the flexibility and reliability of these assets will become even more vital for grid stability, due to the rising share of intermittent renewable sources in the European energy mix.

EPIF has commenced conversion projects to complete phase-out of lignite by 2030 and replace the fleet by a balanced mix of gas fired CCGT plants, biomass units and waste incinerator plants. During the transitional period, EPIF envisions that the CCGT units will primarily rely on natural gas, while concurrently ensuring that the technology is suitably equipped to combust a proportion of renewable gases. This proportion is projected to progressively increase, with the potential to ultimately reach 100%. EPIF is committed to using solely renewable gases in the gas turbines for heat and power generation by 2035, in line with the EU Taxonomy criteria, subject to sufficient availability of these gases (hydrogen, biomethane, synthetic methane) and adequate infrastructure in place for their distribution.

Germany

The Mehrum power plant was taken off the German merchant market in 2021 but was kept operational at the request of the German transmission system operator and then resumed operations in 2022 following an emergency intervention of the German government. The power plant was finally decommissioned in March 2024.

To accelerate the energy transition and to facilitate the transformation of coal regions in the most dedicated and efficient way, EPH shareholders intend to separate lignite operations in Germany from the EPH Group into EP Energy Transition, the holding company of a newly established group and a sister company of EPH, by the end of 2025. Disposal of EPH Group's 50% share in LEAG took place at the end of 2023. By the end of 2025, EPH intends to dispose of its 100% stake in MIBRAG Energy Group.

Through its subsidiary MIBRAG Energy Group EPH currently operates the Schkopau power plant (900 MW) and Wählitz power plant (31 MW) which are planned to be shut down by 2034 and 2035, respectively. The current German government may reconsider the timing of the phase-out. The parties agreed in their coalition agreement to "ideally" achieve coal exit by 2030.

United Kingdom

EPH Kilroot power plant operations had been driven by a capacity contract to ensure grid stability in Northern Ireland. The coal units were decommissioned in September 2023 and are to be replaced by two new OCGT units on the Kilroot brownfield site supported by already awarded capacity contracts.

France

The Emile Huchet 6 power plant in France was closed in March 2022. However, in response to worsening energy situation in Europe, the plant resumed operations after intervention of the French government to increase security of supply in the winter periods. The plant is expected to be activated until March 2025.

Italy

In Italy, EPH hard coal power plant Fiume Santo in Sardinia, Italy, is an indispensable source of power on the island. Although Italy has committed to a coal exit by 2025, the specific situation on the island, which currently does not have an adequate gas connection, does not allow closure of the plant before an alternative source of power is identified¹⁸. The new selected technology depends on discussions with local authorities where biomass is considered as a potential alternative.

3.5 EU Taxonomy alignment

EPH aims to align expenditures with the EU Taxonomy objectives preparing for accommodation of renewable gases once these are deployed on a large scale. In 2022, 79% of Capex was spent on Taxonomy eligible activities, while 13% was fully aligned. In 2023, based on preliminary figures, the ratio of eligible Capex is expected above 70% again.



Taxonomy aligned activities mainly include development and maintenance of the power distribution network, hydrogen-aligned sections of the gas distribution network, district heating networks, cogeneration biomass unit, and hydrogen-ready cogeneration heating plants.

Taxonomy eligible Capex primarily included development of 3 new-build hydrogen-ready CCGT/OCGT projects, which are in the construction phase. Whether these projects will meet all EU Taxonomy criteria is subject to further assessment. EPH envisages that its OCGT power plant developed in Kilroot, Northern Ireland, is well positioned to comply with the EU Taxonomy criteria.

3.6 Capex investments in coal, oil, and gas

In 2022, 54% of Capex related to electricity generation from natural gas (mainly new hydrogen-ready CCGT/OCGT plants), 14% related to existing coal assets and 9% related to midstream and downstream gas infrastructure (partly upgrade to hydrogen-ready pipes).

3.7 EU Paris-Aligned Benchmarks

¹⁸ The recently released draft of the National Integrated Energy and Climate plan of Italy (PNIEC) anticipates that the operation of the Fiume Santo power plant will be necessary until 2028, subject to the successful completion of the electricity interconnection of the island with continental Italy

EPH is currently not part of Paris Aligned Benchmarks (PAB Equity or Bond Index). EPH has the ambition to meet the PAB benchmark requirements in the medium-term following the coal exit.

3.8 Embedding transition plan in overall business strategy and financial planning

The main business strategical goal of EPH is to provide security of supply through dispatchable power sources and integrated gas infrastructure, while concurrently reducing its carbon footprint and ensuring readiness for renewable gases in the long term.

The transition plan of EPH consists in ensuring that each asset has either a phase-out plan or a clearly defined role in a net zero energy system. Development Capex is primarily directed towards those netzero aligned assets, while other Capex is limited to sole maintenance to ensure safe and reliable operation of the remaining coal assets and gas power plants where the path to renewable gases is not foreseen.

3.9 Governance of transition plan

The EPH board of directors is regularly informed on ESG matters by the ESG officer of EP Power Europe and EPIF. The EPH board of directors approves sustainability reports with the decarbonization targets, the underlying decarbonization strategy and Capex plans that underpin the emission reduction goals, with each segment's directors responsible for preparing their respective Capex plans.

3.10 Update on progress in implementing transition plan

In 2023, EPH reinforced its focus on dispatchable power generation through acquisition of four CCGT plants in Netherlands. In September 2023, the Kilroot hard coal power plant in the UK was decommissioned. EPH continued with major CCGT / OCGT development projects in the UK and Italy, ready to commission the first units in the course of 2024. EPH also progressed with its plans to convert lignite-based district heating plants in the Czech Republic.

For the financial year 2023, EPH had its Scope 1 and Scope 2 GHG emissions externally verified for the first time in line with the ISAE 3000 assurance standard. The EPH Group aims to continue to implement this external auditing practice in future reporting years, also including Scope 3 emissions in the assurance process when EPH intends to make its first Scope 3 disclosure in the first half of 2025.

4 Green Finance Framework

4.1 Rationale for Green Finance Framework

The creation of this Green Finance Framework (the "Framework") is a consistent and tangible step to further EPH's commitment to sustainability and to mobilize all its stakeholders around this objective. The Framework covers issuance of green finance instruments ("Green Finance Instrument or Green Financing") and allows for the alignment of funding instruments with the material sustainability topics, related investments, and targets. By further promoting its sustainability ambitions (both internally and externally) and reinforcing engagement with investors and other stakeholders, EPH believes any Green Financing will accelerate the journey towards its sustainability ambition. The sustainable finance instruments issued under this Framework are intended to contribute to implementing the decarbonization strategy of EPH described above.

In line with the ICMA's 2021 Green Bond Principles¹⁹ (GBP), as well as the 2023 LMA Green Loan Principles²⁰ administered by the Loan Market Association ("LMA"), this Framework is presented through the following core components:

- Use of Proceeds
- Process for Project Evaluation and Selection
- Management of Proceeds
- Reporting

¹⁹ ICMA Green Bond Principles 2021 (with June 2022 Appendix I)

²⁰ LMA Green Loan Principles 2023

- External Review

Through this Framework, EPH may issue different Green Finance Instruments (which may include, but are not limited to, bonds (including private placements, hybrid and convertible bonds), loans, Schuldschein instruments, guarantees, letters of credit and other green debt or hybrid financing instruments).

4.2 Use of Proceeds

EPH will allocate an amount equivalent to net proceeds of Green Financing to finance or refinance, in whole or in part, a portfolio of projects aligned with the eligibility criteria in this Framework ("Eligible Green Projects") within the following eligible categories. Eligible Green Projects can include asset values, investments and Capex and operational expenditure ("Opex") associated with the eligibility criteria outlined below ("Eligibility Criteria"). Capex and Opex will qualify with no lookback period. Opex shall typically represent non-capitalized portion of repair and maintenance of the eligible assets. No variable operating costs (such as fuel costs) can be included within eligible Opex.

In drafting this Green Finance Framework and defining the Eligibility Criteria, EPH considered the Green Bond Principles, Green Loan Principles as well as the EU Taxonomy Regulation²¹. EPH's ambition is to go beyond the Eligibility Criteria presented below and align this Green Finance Framework for green use of proceeds categories with the requirements of the EU Taxonomy Regulation for the climate change mitigation objective, including the requirements of the Do No Significant Harm (DNSH) assessment and minimum (social) safeguards.

The portfolio of Eligible Green Projects ("Eligible Green Project Portfolio") will incorporate assets at their most recent IFRS balance sheet value. This value will be consistently revised to account for ongoing investments and depreciation charges.

Based on the current value of Eligible Green Projects described above, the indicative share of refinancing in the total portfolio is estimated at 84%, while the share of financing of new projects is estimated at 16%.

ICMA GBP/GLP Project Category	Eligibility Criteria	UN SDGs	Link to EU Taxonomy
Renewable Energy Electricity distribution infrastructure	 Assets, Investments, Capex and Opex relating to electricity distribution infrastructure and equipment that meets one of the following criteria: a) The system is the interconnected European system, i.e. the interconnected control areas of Member States, Norway, Switzerland and the United Kingdom, and its subordinated systems b) Over 67% of newly connected generation assets comply with the 100gCO₂/kWh threshold (over a rolling 5-year period), or c) The grid's average emissions factor is less than 100gCO₂/kWh 	7 AFFORDABIL AND DEADE DEADE	Substantial contribution to Climate Change Mitigation: 4.9 Transmission and distribution of electricity
	proxy for this threshold any direct grid connections of		

²¹ Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending regulation (EU) 2019/2088. See here.

	power plants other than wind, solar or hydro ²² energy will be excluded)		
Renewable Energy Gas distribution infrastructure	 Assets, Investments, Capex and Opex relating to renewable and low-carbon gas distribution infrastructure and equipment: Construction or operation of new transmission and distribution networks dedicated to hydrogen or other low-carbon gases Conversion/repurposing of existing natural gas networks to 100% hydrogen Retrofit of gas transmission and distribution networks that enables the integration of hydrogen and other low-carbon gases in the network, including any gas transmission or distribution network activity that enables the increase of the blend of hydrogen or other low carbon gases in the gas system 		Substantial contribution to Climate Change Mitigation: 4.14 Transmission and distribution networks for renewable and low carbon gases
Energy Efficiency Power and heat generation, district heating networks	 Assets, Investments, Capex and Opex relating to Pipelines and associated infrastructure for distribution of heating and cooling produced using at least 50 % renewable energy, 50 % waste heat, 75 % cogenerated heat or 50 % of a combination of such energy and heat: Construction and operation Refurbishment Modification to lower temperature regimes; Advanced pilot systems (control and energy management systems, Internet of Things). Co-generation of heat/cool and power from bioenergy, as per the substantial contribution criteria to climate change mitigation of the Climate Delegated Act (Annex I) under 4.20 Electricity generation from fossil gaseous fuels, as per the substantial contribution criteria to climate change mitigation of the Complementary Climate Delegated Act on gas energy activities (Annex I) under 4.29 High efficiency co-generation of heat/cool and power from fossil gaseous fuels as per the substantial contribution criteria to climate Delegated Act on gas energy activities (Annex I) under 4.29 	7 ATOMAHLAN Dia GRAY 13 ADATA	Substantial contribution to Climate Change Mitigation: 4.15 District heating/cooling distribution 4.20 Cogeneration of heat/cool and power from bioenergy 4.29 Electricity generation from fossil gaseous fuels 4.30 High efficiency co- generation from of heat/cool and power from fossil gaseous fuels ²³ 4.31 Production of
	mitigation of the Complementary Climate Delegated Act on gas energy activities (Annex I) under 4.30		heat/cool from fossil gaseous fuels in an efficient district heating and cooling system

 ²² Connections to hydro will only be eligible if aligned with the substantial contribution criteria to climate change mitigation of the Climate Delegated Act
 ²³ On Feb 2, 2022, the EU Commission presented a "complementary delegated climate act to accelerate decarbonisation" (see

²³ On Feb 2, 2022, the EU Commission presented a "complementary delegated climate act to accelerate decarbonisation" (see press release, EU Commission of 02.02.2022, https://ec.europa.eu/commission/presscorner/detail/de/ip_22_711). Gas activities are considered to play an important role as a transitional activity and are in line with EU climate and environmental objectives; construction and operation of electricity generation plants (as per 4.29) and cogeneration plants (as per 4.30) using fossil gaseous fuels are considered to be taxonomy-aligned activities, subject to minimum requirements.

Exclusions

For each Green Finance Instrument issued under this Framework, EPH will exclude assets or investments associated with:

- Coal
- Nuclear
- Biomass that does not meet substantial contribution criteria of the EU Taxonomy Regulation²⁴ for the climate change mitigation objective

EPH has identified assets or investments that meet the criteria mentioned above and are considered suitable for Green Financing. The list provided below highlights the most significant assets in terms of value and should not be seen as an exhaustive overview of potential assets that could be financed through Green Financing. EPH recognizes that its infrastructure will continue to accommodate predominantly natural gas in the foreseeable future to meet the demand for this fuel. However, a key principle guiding future investments in gas infrastructure will be its ability to incorporate renewable gases and facilitate a transition away from natural gas.

Power distribution network in central Slovakia

The network represents a vital part of the interconnected European system. Its maintenance and further development are vital to increase its resilience to accommodate the ramp up of renewable generation sources in the European energy mix. The network facilitates the expansion of renewable generation sources. In 2018-2022, 88% of the newly connected capacity have been renewable energy sources, such as solar and hydroelectric facilities.

Hydrogen-ready parts of the gas distribution network in Slovakia

The existing natural gas distribution network is well-suited to accommodate renewable gases and has the capability to connect biomethane facilities. SPPD manages a registry of renewable gases, allowing end consumers interested in decarbonization to purchase guarantees of origin from biomethane suppliers. The projected growth of biomethane indicates its increasing importance, with an estimated potential to contribute up to 10% of Slovakia's current gas consumption. Looking ahead, efforts are underway to gradually prepare the network for a complete transition to 100% hydrogen utilization. At present, approximately 59% of the local networks are constructed using polyethylene, a material fully compatible with hydrogen distribution. Additionally, all newly installed pipes are made from this hydrogen-ready material, ensuring full preparedness for the transition to hydrogen distribution. Given that the gas distribution network already covers a significant portion of Slovakia, reaching approximately 94% of the population, future Capex spent on expansion of the network is likely to be negligible. Instead, the primary focus will be on converting and upgrading the existing network to ensure readiness of the network for a range of renewable gases.

District heating networks in the Czech Republic

The heating networks facilitate the distribution of hot water, almost exclusively generated through a highly efficient cogeneration process. EPH, which also manages the adjacent heating plants responsible for supplying heat to the network, predominantly relies on lignite as the energy source. However, EPH is committed to fully decarbonizing these sources, as detailed in the subsequent section.

²⁴ Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending regulation (EU) 2019/2088. See <u>here</u>.

Hydrogen-ready CCGT heating plants in the Czech Republic

EPH intends to transition from the current lignite-based heating plants to a balanced combination of low carbon technologies. The incorporation of biomass units and waste incinerator plants will contribute to diversification efforts, but the primary focus shall be on Combined Cycle Gas Turbine (CGGT) units. These units are recognized as fully compatible with the future net zero energy system. When evaluating these technologies, EPH places significant importance on their ability to accommodate various renewable gases, including hydrogen. As the share of renewable energy sources is expected to increase rapidly, the dispatchable CCGT units will play an increasingly vital role as peaking sources, ensuring the security of energy supply and grid stability. The conversion of these units to renewable gases is crucial to ensure their continued utilization within the net zero economy.

Hydrogen-ready CCGT / OCGT power plants

EPH is one of Europe's most active developers of controllable power generation sources critical for grid stability with 4.1 GW of OCGTs/CCGTs projects (all of them hydrogen-ready) currently under construction or considered for development. EPH acknowledges that meeting the set of stringent substantial contribution criteria under the EU Taxonomy might only be possible for certain plants. As an example, the Kilroot OCGT power plant in the UK is well positioned to fit in the criteria owing to (i) low absolute emissions attributable to a load factor typical for OCGT plants, (ii) replacement of an older coal power plant decommissioned in 2023, and (iii) UK power sector decarbonization strategy which envisages renewable gases to fully replace unabated natural gas by 2035.

4.3 Process for Project Evaluation and Selection

Projects financed and/or refinanced through Green Financing proceeds are evaluated and selected by EPH Green Finance Committee (the "Green Finance Committee"), formed by representatives from Treasury/Financing, Sustainability, Investor Relations, and other parties to be nominated as subject matter experts. The Green Finance Committee is responsible for:

- Reviewing the content of this Framework and updating it to reflect changes in corporate strategy, technology, market, or regulatory developments on a best effort basis;
- Updating external documents such as second party opinion ("SPO") and related documents from external consultants and accountants;
- Evaluating and defining the Eligible Green Project Portfolio in line with the Eligibility Criteria as set out in the Framework; excluding projects that no longer comply with the Eligibility Criteria or have been disposed of and replacing them on a best effort basis;
- Ensuring that the characteristics of the Eligible Green Project Portfolio have not materially changed, particularly in respect of the transition risk and locking in emissions from the prolonged use of fossil fuels;
- Overseeing, approving, and publishing the allocation and impact reporting, including external assurance statements. EPH may rely on external consultants and their data sources, in addition to its own assessment;
- Monitoring internal processes to identify known material risks of negative social and/or environmental impacts associated with the Eligible Green Project Portfolio and appropriate mitigation measures where possible; and
- Liaising with relevant business finance segments and other stakeholders on the above.

The Green Finance Committee will meet at least on an annual basis and will report to the EPH board of directors at least on an annual basis. Resolutions by the Green Finance Committee will require unanimous consensus of all its members, granting each member the power of veto.

ESG Policies

EPH has put in place a number of policies connected to ESG area, such as ESG Master Policy²⁵, setting out a comprehensive policy framework for the EPH Group as well as defining the core principles for sustainability related policies within EPH and its core subsidiary companies. EPH's Environmental Policy²⁶, defines the Group's commitments in regard to behavior that has a direct or indirect impact on the environment. EPH policies address various aspects of its operations including biodiversity, procurement, diversity and inclusion, as well as anti-corruption measures.

In November 2023, EPH received an ESG Risk Rating of 22.4 from Morningstar Sustainalytics, confirming its position in the medium-risk category, 25th out of 104 companies in the Multi-utilities sector. EPH complies with official national and international environmental and social standards and local laws and regulations, on a best effort basis across all its activities. These laws are monitored and enforced by the local authorities, amongst others as part of obtaining the necessary permits for new projects and infrastructure maintenance. EPH's environmental and social risk policies define minimum standards for all its activities, including those financed with the proceeds of Green Financing issued under this Framework. The table below presents an overview of relevant codes and policies established at EPH²⁷:

ESG Master Policy	Sanctions Policy
•	•
Environmental Policy	Anti-Trust Law Policv
•	•
Biodiversity Policy	Policy on Reporting of Serious Concerns
Procurement Policy	Asset Integrity Policy
·····	······································
Cybersecurity Principles	Equality, Diversity and Inclusion Policy
Code of Conduct	Operational Policy
Tax Governance policy	Anti-Corruption and Anti-Bribery Policy
KYC Directive	Anti-Financial Crime Policy

To ensure the effective management of health, safety, and environmental aspects of day-to-day operations, both main EPH sub-holdings EP Power Europe and EPIF have established their own health, safety, and environmental committee. These committees are responsible for evaluating pertinent policies, offering guidance, and making recommendations concerning crucial safety, health, environmental, and security matters. The committees provide quarterly reports to the respective board of directors and closely monitor key performance indicators. Consisting of members appointed by the respective board of directors for an indefinite term, the committees convene approximately five times a year.

EPH's approach to managing climate change-related risks

Physical risks

EPH acknowledges that more frequent and extreme weather events are a risk as they can damage infrastructure assets and lead to interruptions in the supply of vital commodities. In some of our operating regions, the offtake of cooling water may be reduced, which could affect our heat and power generation capacities.

Guided by EPH's Asset Integrity Policy, EPH ensures that the decisions it makes consider all life-cycle stages of its assets, recognizing the interconnectedness of the systems. EPH's short-term investment decisions are always based on the rigorous analysis of long-term projections of investment needs. EPH

²⁵ EPH ESG Master Policy

²⁶ EPH Environmental Policy

²⁷ https://www.epholding.cz/en/polices-connected-to-esg-area/

has established predictive maintenance processes to identify points in its network where maintenance should be preferentially performed. Additionally, EPH adequately insures key infrastructure and continuously monitor the water offtake at its individual sites and consult with local water authorities. EPH continuously implements measures to reduce water offtake and limit reliance on flow-based cooling.

One of the most vulnerable assets within EPH portfolio is its power distribution network in central Slovakia. The adverse impacts of more extreme weather events (storms, winds, wildfires) induced by changing climate bring about material incremental costs as well more frequent discomfort to end consumers. In response, EPH subsidiary Stredoslovenská distribučná ("SSD") performs regular monitoring of adjacent areas to identify potential risks, mainly in forest areas. SSD identifies the most vulnerable locations where it preferentially replaces overhead lines with underground cables. When expanding the network into new areas, resilience to weather impacts is a primary factor considered and the technical solution is designed accordingly.

Transition risks

EPH recognizes the critical importance of addressing the risk of assets becoming non-competitive or obsolete due to market shifts and regulatory changes. The emergence of low-carbon solutions and the increasing favorability towards renewable energy sources are reshaping industries worldwide. The growing global consensus on the need to mitigate climate change has led to increasing pressure on industries to reduce their carbon footprint. Consequently, there is a rising demand for low-carbon solutions across various sectors, including energy production. As a result, assets reliant on traditional, carbon-intensive technologies may face challenges in remaining competitive in the market.

As a company involved in the fossil fuel sector, with strong focus on natural gas, EPH recognizes the transitional role of gas and acknowledges the imperative to replace it with green alternatives. For this transition to occur effectively, renewable gases must attain commercial competitiveness, or the regulatory framework must facilitate their competitiveness relative to natural gas. Failure to transition to renewable gases leaves EPH vulnerable to the effects of carbon pricing mechanisms, renewable energy targets, and emissions trading schemes, all of which can significantly alter the economic landscape of energy production and consumption. Assets that do not align with these regulatory requirements risk facing heightened operational costs or regulatory penalties, thereby jeopardizing their competitive standing.

EPH addresses transition risks by ensuring that its assets are on a trajectory to become compatible with a net zero energy system. The importance of such assets is underscored by the regulatory frameworks in the countries where EPH operates, which offer investment subsidy programs or capacity payment mechanisms to facilitate the development of these dispatchable generation sources.

EPH's approach to Just Transition

Energy transition goes beyond technological advancements and environmental considerations as it encompasses a wide range of social dimensions from the affordability of energy for consumers to the livelihoods of workers in the energy sector. EPH acknowledges the importance of addressing these social aspects to ensure that the transition is fair and inclusive.

EPH recognizes that higher investments in energy transition ultimately translate to costs borne by end consumers or taxpayers. Therefore, it is imperative to pursue cost-effective solutions that minimize the financial burden on society while still achieving the desired environmental outcomes. By opting for cost-efficient technologies and strategies, EPH strives to make the energy transition economically viable and socially acceptable.

At the heart of EPH's approach to energy transition is the principle of ensuring the affordability of vital commodities for the population. Recognizing that the transition will only be socially acceptable if it does

not impose undue financial hardship on consumers, EPH prioritizes measures to mitigate the impact on energy prices and ensure access to essential services for all members of society.

The closure of power plants as part of the energy transition inevitably leads to job losses in affected communities. While some jobs may be lost in the decommissioning of coal-fired plants, EPH endeavors to create new employment opportunities in the operation of cleaner, more sustainable energy facilities. By investing in training and re-skilling programs, EPH seeks to support affected workers in transitioning to new roles in the evolving energy landscape.

4.4 Management of Proceeds

EPH will allocate an amount equivalent to net proceeds from the Green Financing to finance or refinance, in whole or in part, the Eligible Green Project Portfolio. Projects will be selected in accordance with the Use of Proceeds criteria and the Evaluation and Selection process presented above.

The EPH Green Finance Committee will monitor the portfolio of Eligible Green Projects using an internal project register. If an Eligible Green Project no longer meets the definition of Eligible Green Project as outlined in section 4.2, EPH will remove this asset from the portfolio of Eligible Green Projects and will strive to replace it with another Eligible Green Project as soon as reasonably practicable.

EPH will, over time, achieve a level of allocation for the Eligible Green Project Portfolio which matches the balance of net proceeds from its outstanding Green Financing. Additional Eligible Green Projects will be added to EPH Eligible Green Project Portfolio to the extent required to ensure that the net proceeds from outstanding Green Financing will be allocated to the Eligible Green Project Portfolio.

Pending full allocation, any unallocated Green Financing net proceeds will be invested, managed or held by EPH on a temporary basis, at its own discretion, in cash, cash equivalents, and/or other short-term liquid instruments.

4.5 Reporting

EPH will publish a report on the allocation of proceeds to the Eligible Green Project Portfolio as well as an impact report annually and at least until full allocation or until maturity.

EPH will report the allocation and impact of the net use of proceeds to the Eligible Green Project Portfolio at least at the category level and on an aggregated basis for all EPH's Green Financing outstanding.

EPH will align its reporting with the approach described in the ICMA "Handbook – Harmonized Framework for Impact Reporting (June 2023)^{"28} on a best effort basis.

Allocation Reporting

The allocation report will provide:

- Total amount of assets, investments, and expenditures in the Eligible Green Project Portfolio, per eligible category
- The amount or percentage of new and existing projects (financing vs. refinancing)
- The balance of unallocated proceeds
- The geographic location of the projects, where feasible
- The percentage and amount of taxonomy eligible and taxonomy aligned activities

Impact Reporting

The impact report will provide the following and also include a description of underlying methodology and assumptions used:

- Estimated annual avoided GHG emissions (in tonnes CO₂e/year)

²⁸ https://www.icmagroup.org/assets/documents/Sustainable-finance/2023-updates/Handbook-Harmonised-framework-for-impact-reporting-June-2023-220623.pdf

- Reduction in the average emission intensity (in gCO₂/kWh)
- Installed capacity of low emission sources replacing coal units (in MW/year)
- Length of the gas distribution infrastructure adapted to hydrogen (in km/year)
- Connection of the renewable generation capacity to the power distribution network (in MW/year)
- Smart grid components installed in the power distribution network, e.g. smart meters

4.6 External Review

Second Party Opinion (pre issuance)

This Framework has been reviewed by (i) Sustainable Fitch and (ii) S&P Global, who have issued an independent Second Party Opinion. The Second Party Opinions as well as this Framework will be accessible through the EPH website.

Verification (post issuance)

EPH will request on an annual basis, starting one year after issuance and until maturity (or until full allocation), a limited assurance report of the allocation of the proceeds to the Eligible Green Project Portfolio and the impact reporting, provided by its external auditor (or any subsequent external auditor).

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No representation is made as to the suitability of any green financial instrument to fulfil environmental and sustainability criteria required by prospective investors. Each potential purchaser of green financial instruments should determine for itself the relevance of the information contained or referred to in this framework or the relevant documentation for such green financial instruments regarding the use of proceeds and its purchase of green financial instruments should be based upon such investigation as it deems necessary.

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