RECOMMENDATIONS FOR BANKS

GAS POWER POLICY

These policy recommendations are based on scientific elements and technical knowledge available in January 2025. They are intended to evolve over time, notably considering relevant climate and environmental science advances, best practices and technological developments.

I. OVERALL STRATEGY

IEA's NZE scenario, the agency's only scenario that aligns with the goal of limiting global warming to 1.5°C, envisions that electricity generation will be completely decarbonized by 2035 in advanced economies[1], and by 2040 in the rest of the world.

Achieving this goal requires a massive development of electricity production from sustainable power sources in replacement of fossil power sources. From this perspective, the systematic development of gas-fired power plants (gas plants) as a replacement for coal or to meet the increasing demand for electricity must be avoided as it would hinder the achievement of carbon neutrality in electrical systems.

Priority should be given to sustainable power supply alternatives. All flexibility options must be utilized first, also large-scale battery storage systems and better load management in the energy system. All of this must take priority over the construction of new fossil power plants.

The long-term economics of gas plants, in comparison with sustainable power supply, are changing quickly. In more and more cases, including in Europe and some parts of the United States, battery operators are already supplying back-up power to grids at a price competitive with gas plants.

II. FINANCING CRITERIA AT PROJECT LEVEL

A. Default approach

No new gas plant should be eligible for financial support, even for plants planning a conversion to "alternative" gases (including bioenergy or green hydrogen[2]).

[1] In IEA's scenarios, "advanced economies" are OECD countries, Bulgaria, Croatia, Romania, Malta and Cyprus. Regarding European countries, though each country has its specifics, most are interconnected in the synchronous grid of continental Europe. Therefore, it makes more sense to encompass all European countries, and we refer instead to "OECD and European countries".

[2] Green hydrogen production is essential for the decarbonization of other industrial sectors, such as steel and long-distance maritime transport, which have fewer alternatives for emission reduction. Given its limited availability, green hydrogen should be prioritized for these sectors, while the electricity production sector has other means of decarbonization, such as sustainable energy sources combined with flexibility. See Q&A.

Limited exceptions might be allowed and must be subjected to the following conditions:

B. Evaluation criteria for exceptions

1) **Business front offices must refer to the head office** for approval before they proceed with the exception.

2) The project must comply with the following requirements:

> In OECD and European countries, the project concerns OCGT peaker[3] plant, with a carbon intensity inferior to 425 gCO2eq/kWh.

> Outside OECD and European countries, the project concerns:
- OCGT plant with a carbon intensity inferior to 425 gCO2eq/kWh;
- CCGT plant with a carbon intensity inferior to 240 gCO2eq/kWh.

These carbon intensity thresholds must not be based on Carbon capture and storage (CCUS) infrastructure.

> An independent impact assessment must be conducted and made publicly available. It must:
- Demonstrate that no project already under development, nor any interconnection capacity, can replace the identified need for production capacity;
- Demonstrate that no alternatives of renewable energy, energy efficiency (including reduced electricity consumption through better demand management) for new captive projects, development of electrical grids, large-scale battery storage systems or better load management, and a mix of these different solutions, can replace the identified need for production capacity;
- Demonstrate the project's compatibility with national decarbonization commitments/plans and the carbon neutrality trajectories of the power sector in the NZE scenario;
- Include the long-term economic viability of the power plant project, not just short-term, including considering periods of high gas prices.

> The project must include a system of measuring and reducing methane emissions, including methane leaks.

3) **Financial services provided through these exceptions must be disclosed** annually by the financial institution in its sustainability reporting or climate reporting, with open access to the related impact assessment. The reporting must include the number of gas plants supported under the exception framework with the reasons for the exception.

[3] According to EU BAT, peakers operate only tens or hundreds of hours a year (source). According to the industry, peakers run less than 1500 hours (source). According to CleanGroup, peakers have a maximum capacity factor of 15% - 1314 hours (source).

III. Financing criteria at corporate level

Banks should immediately commit to end all financial services to gas power expansion and phase-out their exposure to gas power, by 2035 in OECD and European countries and by 2040 in the rest of the world.

To that end, banks shall also adopt time-bound restrictions regarding companies involved in *gas power development* (i.e. with projects of gas-fired power plants proposed and/or under construction), with the aim of preventing its expansion and supporting its replacement with sustainable power alternatives. Achieving these measures will require banks to:

- Make public their expectations from *relevant companies* (i.e. companies involved in the power supply sector, in particular power utilities) and associated exclusions.
- Engage with the relevant companies to induce them to meet expectations, with the commitment to stop providing all financial services to companies that don't meet the expectations.

A. Company selection

Banks shall adopt time-bound restrictive measures to end all support to gas power expansion by stopping providing financial services to "gas power developers", such as defined in the Global Oil & Gas Exit List (GOGEL).

B. Exclusion criteria

Banks shall condition further financial services to those companies to:

- By January 2026, **the end of gas power development**. Rare exceptions can be tolerated, only if they comply with the criteria detailed in section II-B. Compliance with the exceptions criteria shall be publicly disclosed by the bank;

- By January 2027, **a public commitment to phase-out gas power** aligned with a 1.5°C scenario and the objective to decarbonize the power sector, by 2035 in OECD and European countries, and by 2040 in the rest of the world;

- By January 2028, **a detailed asset-by-asset closure (and not selling nor converting to "alternative" gases) timetable** aligned with a 1.5°C and the objective to decarbonize the power sector, by 2035 in OECD and European countries, and by 2040 in the rest of the world.

C. Possible exceptions for dedicated financing

Temporary exceptions to the above measures may be made only for project financing or, with certain conditions, to dedicated financing (for example via use of proceeds bonds). Such financing must be explicitly earmarked for activities related to sustainable power supply and must not be used for other activities. General purpose financing shall not be subject to such an exception, as the financing could be used for unsustainable activities.

For example, an exception could be tolerated for green bonds, or other use of proceeds bonds, if the issuer's definition of "green" is rigorously verified and strictly limited to sustainable

power supply activities[4]. A Second Party Opinion on the issuer's framework alone does not guarantee the sustainable attributes of these debt instruments. **It is recommended for banks to have a public framework that clearly defines the activities they may finance** with sustainable debt market instruments and to verify the compatibility of the overall strategy of the issuer with their own commitments.

This exception must remain temporary and only apply for a limited amount of time. The bank should set a deadline for this exception by which the company must align its corporate strategy with a 1.5°C scenario and comply with the criteria mentioned in this policy.

[4] See Reclaim Finance's definition of sustainable power supply.

IV. Q&A: THE ROLE OF GAS POWER IN THE POWER SYSTEM

Abbreviations and acronyms:

IEA: International Energy Agency
NZE: IEA's 'Net Zero Emissions by 2050' scenario
OCGT: open-cycle gas turbine
CCGT: combined-cycle gas turbine
CCS/CCUS: carbon capture and (utilization or) storage
VRE: variable renewable energy (i.e. wind and solar)
GHG: greenhouse gases
OECD: Organization for Economic Cooperation and Development
DNSH: Do no significant harm

> If there should be no new gas plants development by default, why do you allow exceptions?

While electricity demand and production must always be equal, to avoid severe stress and damage to the grids, the variability of demand and sustainable production poses a challenge. However, certain gas plants, known as "peakers", can rapidly increase their production, allowing for quick adjustment of electricity production to demand at the grid level. Such plants, in very specific cases, may therefore be necessary on a transitional basis until more sustainable means of providing flexibility to electricity demand and production are further developed, such as demand-side management or storage solutions (on the production side).

To assess that, the IEA modelled[5] several energy systems with 70% to 90% of annual power generation from VRE sources to assess the needs for short-duration and seasonal flexibilities[6]. According to the results, **the role of thermal power plants is essentially to provide seasonal flexibility, and the current stock of legacy thermal capacity is sufficient** to do so. Hence, priority should be given to sustainable power supply, energy efficiency and end-uses transformation while new gas plants should remain exceptional, comply with strict criteria, and their closure should be planned in coherence with a 1.5°C trajectory.

> Which type of gas plants can be allowed under these exceptions?

Under certain conditions, the development of gas plants should be limited to "peakers", meaning plants designed to produce electricity sporadically to ensure the balance between demand and production when other flexibility means are insufficient. To achieve this, only OCGT technology is eligible: indeed, when cold, CCGT plants take between 2 to 4 hours to reach their maximum power, compared to 5 to 10 minutes for OCGT plants. Moreover, in operation, most CCGT plants cannot modify their production by more than 2% to 4% per minute, compared to 8% to 12% for OCGT plants, which are much better suited to modulate their production and accommodate the variability of demand and renewable production[7].

This approach by technology is crucial to avoid supporting gas plants that will ultimately not be used as "peakers" to facilitate the deployment of VRE, but rather for baseload production and therefore further delay the transformation of our energy system.

[5] IEA, Managing Seasonal and Interannual Variability of Renewables, April 2023
[6] Addressing seasonal variability of renewables means that flexibility resources will be needed to varying extents throughout the year, even on a week-to-week or month-to-month basis.
[7] Agora-Energiewende, Flexibility in thermal power plants (p.47-48), June 2017

Contrary to some power utilities affirmations, converting a gas plant from a baseload generation to peaking is costly and complex[8], no exception should be allowed under that justification.

> Why do you make a difference according to geographical areas?

In OECD and European countries, the energy transition is already well advanced, particularly the development of sustainable energy sources. The role of gas power should be limited to supporting the growth and balance between electricity production and demand. Such countries should no longer develop gas plants playing a "baseload" role (CCGT), as these will no longer be needed beyond 2035. Peaker plants, in very few and specific cases, and under strict conditions outlined in this policy, can however provide a transitional benefit.

Conversely, there is a longer path for less advanced economies, where the needs for electrification are higher, while the investment capacities, crucial for the development of sustainable power, are lower. In these countries, certain exceptions subject to specific conditions outlined in this policy may lead to the development of CCGT plants, playing a "baseload" role, and not only peaker plants supporting the development of sustainable energy sources.

However, financial actors should always favor sustainable power sources when possible, even in less advanced economies.

> How do you explain your choice of carbon intensity thresholds?

In any case, strict carbon intensity thresholds are essential for balancing immediate energy needs with long-term decarbonation and climate objectives. These thresholds should be based on existing taxonomies while considering technical advances in the industrial sector and not consider hypothetical mitigation via CCS.

Several taxonomies, such as the EU Taxonomy[9] and the ASEAN Taxonomy[10], set a "green" threshold at 100 gCO2e/kWh for the lifecycle GHG emissions of electricity generation from gas. While we believe this should be the objective to achieve in the medium-term, we acknowledge that a higher threshold could be used as a short-term and temporary reference, based on a DNSH approach.

In the EU taxonomy, the DNSH threshold is intended to align on the average EU carbon intensity[11]. The Platform of Sustainable Finance recently recommended that this threshold be set to 240 gCO2/kWh from 2025[12]. This is consistent with some of the most efficient CCGT technology[13]. Regarding OCGT, the ASEAN Taxonomy's "amber tier 2" threshold (425 gCO2/kWh) should be considered as an absolute maximum.

[8] It requires the modification of the plant's generation system (gas turbine, heat recovery system generator) at significant cost, depending on the capacity. The plant's operating time is then reduced from at least 5,000 full load hours per year (even more than 8,000 hours in some cases) to less than 1,500 hours per year.
[9] See EU Taxonomy
[10] See ASEAN Taxonomy
[11] In 2023, the EU's electricity had an average carbon intensity of 244 gCO2/kWh (Ember, November 2024).
[12] DG-FISMA, Taxonomy Report (draft) (p.33-35), January 2025. The report also suggests that the DNSH threshold could be based on the EU median intensity (205 gCO2/kWh), rather than the average value.
[13] For instance Fortuna's turbine (Germany) has a carbon intensity of 230 gCO2/kWh. See also Siemens GHGP calculations using an intensity of 232 gCO2/kWh.

> Why not include alternative fuels?

A hypothetical future conversion of the plant to an alternative fuel, such as green hydrogen or bioenergy, should under no circumstances justify an exception. Replacing fossil gas at scale with those fuels in power production is neither feasible nor desirable[14].

Firstly, it is virtually impossible to replace fossil gas with those fuels given the massive gap in resources availability. Indeed, in the NZE scenario, the energetic volume of biogas and hydrogen increase to reach respectively 6 EJ and 15 EJ, while the current fossil gas energetic volume is 145 EJ[15].

Secondly, using hydrogen or bioenergy for power generation is not sustainable. On the one hand, green hydrogen requires high amounts of energy and currently represents less than 1% of global production. Green hydrogen should thus be limited to non-electrifiable sectors and industries (such as steel), not power generation where more efficient alternatives are available to scale[16]. Hence, alleged "hydrogen-readiness", which does not guarantee actual future use of hydrogen[17], is likely to lock-in even more fossil gas power production. On the other hand, bioenergy at industrial scale can present the same lifecycle GHG intensity as fossil fuel, compete with agricultural use of land or damage ecosystems[18].

> Why not include carbon capture?

CCUS suffers from severe shortcomings[19], including significant costs that are often underestimated, high energy consumption – such a system consumes 20 to 30% of the power plant's energy – consequently increasing fossil fuel consumption, and insufficient capture performances, making this technology unable to meet its promises when implemented. Moreover, while discussed for a long time, the projects running worldwide all run below the promised capture rate and face financial issues[20]. This illustrates how, when moving from paper to reality, CCUS fails to deliver on its potential benefit in a cost-effective manner: betting on this technology therefore adds uncertainty to our ability to reduce our CO2 emissions and cannot justify more gas power capacity. It should never be a justification for an exception to finance a new gas plant by reducing the theoretical carbon intensity of the project, nor be considered as sustainable financing.

> Why is gas not a transition energy? Find out in our set of dedicated factsheets:

- Which reference scenario for which sectoral policy?
- Are new fossil gas projects needed to meet future demand?
- What is the place of fossil gas in a sustainable energy mix?
- What are the hidden flaws of fossil gas?
- What are the risks associated with the development of liquefied natural gas (LNG)?
- Can gas infrastructure be converted to extend its lifespan?

[14] See Reclaim Finance's factsheet on gas infrastructure conversion
[15] IEA, World Energy Outlook, 2023
[16] See Reclaim Finance's factsheet on hydrogen
[17] See ClientEarth, Hydrogen readiness: a Trojan horse for fossil fuel lock-in, April 2025
[18] See Reclaim Finance's factsheet on bioenergy
[19] See Reclaim Finance's factsheet on CCUS in power
[20] See IEEFA's analyses on CCUS and research on Boundary Dam 3 (2021), Petra Nova CCS (2022), and Gorgon CCS (2024).