EU Commission's draft on guidelines for climate, energy and environmental aid (CEEAG)

SWM position paper

As a municipal company, Stadtwerke München (SWM) is 100% owned by the city of Munich, which we supply with electricity, natural gas, district heating and cooling as well as fresh drinking water. We also operate 18 public swimming pools (indoor and outdoor). Our mobility subsidiary MVG is running the public transport system of the city including subway, bus, tram and MVG bike. We are also responsible for the expansion of fiber optics in the city, thus creating the basis for the Smart City of Munich. With over 10,000 employees, we are one of the largest employers in Munich.

The European Green Deal is an important and necessary step towards achieving the climate targets. In order to achieve the ambitious goals of reducing greenhouse gases, expanding renewable energies and increasing energy efficiency, it is important to facilitate aid regimes in these areas. This is the only way to increase the capacity of companies to invest in projects that contribute to achieve the ambitious goals of the EU. SWM welcomes the planned revision of the guidelines for climate, energy and environmental aid (CEEAG) with regard to the new goals of the Green Deal, as the new aid framework introduces categories for areas that make an important contribution to the climate targets - e.g. clean mobility -, recognizes new aid instruments such as “Contracts for Difference” and generally gives the member states more freedom to support measures to achieve the climate targets. Starting in 2022, the new CEEAG lay the foundations for the use of public funds to achieve the goals of the European Green Deal and for the transformation towards a CO2-neutral economy in Europe. Investment decisions in the energy sector are determinations that will last for decades. Therefore, from our point of view, the following aspects must be taken into account when revising the CEEAG:

- In order to achieve the new EU climate targets for 2030 and 2050, a significant acceleration in the expansion of renewable energies is necessary. This accelerated expansion can only take place to the extent planned if the member states set up **effective investment incentives** and **targeted funding programs**. These may not be unnecessarily restricted or thwarted by the proposed guidelines.

- In order to ensure planning and investment security for companies, **grandfathering must apply to projects that have already been approved** or appropriate transition periods must be introduced. If new individual notifications were necessary for investment decisions that have already been made, there would be a severe loss of confidence and, as a result, massive investment reluctance in view of the lack of **political reliability**.

- During the massive expansion of renewable energies and the associated volatility of generation, **security of supply** is facing new challenges. In the foreseeable future, gas-powered combined heat and power plants will play a fundamental role in the stability of the internal electricity market. This should in no way be undermined by the revised guidelines.

- The eligible costs should also be based on the achievement of energy and CO_2 savings through the funded measure. Hence, the following standard must apply: **the higher the savings, the higher the funding**. Since the CO_2 intensity is primarily determined by the energy source used, the aid should be assessed according to which energy source is used. Technologies such as CHP systems or district heating networks in contrast are not “fossil” per se, as they can also be operated with renewable energy sources.

Current situation at SWM

Stadtwerke München is currently investing heavily in the modernization of its CHP plant park. By using the most modern technologies, the emission of CO_2, NOX, CO, noise, etc. is significantly reduced. However, these investments are only profitable with the currently applicable CHP aid.

The following systems are being modernized by SWM:

- Freimann: 100 MW_{el} (improvement of the electrical efficiency by 14%)
- Gas-steam power plant 2: 450 $MWel_{el}$ (25% partial modernization, improvement of the electrical efficiency by 5%)
- Gas-steam power plant 1: 200 MW_{el} (improvement of the electrical efficiency by 13%)

The costs for this modernization add up to approx. € 600 million in total and are in the range that the gas turbine handbook also predicts as customary on the market. It should be noted that the prices specified in the gas turbine handbook (approx. 1000 € / kW for gas-steam power plants) do not include the costs for construction technology, heat extraction, planning, approval, transport, documentation, gas supply, building owner costs, etc. These costs make up another 50% of the costs and are not included in the € 600 million.

Due to the modernization, the provision of district heating through highly efficient CHP can be significantly expanded and the proportion of district heating from coal can be reduced from 44% to 18% in the future. At the same time, the share of heat from geothermal energy will be expanded from originally 0% to 12%.

The modernization thus contributes to the fact that natural gas CHP plants become more efficient, coal-fired power plants are pushed back and the expansion of renewable electricity and heat generation plants is not hindered.

From our point of view, especially the following points in the draft guidelines must be adjusted:

- Nb. 48 d: The restriction of the bid quantity in the tendering process is to be rejected, since it ultimately leads to an unnecessary reduction in the additional construction quantities. If not enough bids are received in a bidding process, the consequence must not be to change the bidding process at short notice. Instead, in order to ensure effective competition in the next bidding process, the causes of the reluctance to bid should be eliminated. Because if the tender volumes are no longer reliable, the participation rate threatens to drop even further.

- Nb. 77: It is understandable that the use of biomass in the energy sector should not have any negative effects on the market for forest biomass in general. However, the market is likely to be very difficult to monitor due to difficulties such as the bark beetle or storm as well as the climate-related forest conversion and negative effects of energetic use can hardly be detected. Apart from that, high-quality wood (e.g. construction timber) is much more expensive and will therefore not be used as fuel due to its economic efficiency alone. In contrast, the amounts of residual wood (branches, tree tops, chesswood, ...) that arise from the use of wood are certainly a suitable fuel. In this context, it is important that there are no unnecessary restrictions or reporting obligations for the operator.

- Nb. 92: It is to be welcomed that the CHP technology in the new section 4.11 as a climate protection technology is placed on the same level as renewable energies. With regard to the multifunctionality of CHP systems, however, it is necessary to clarify whether the funding option and the tenders according to Section 4.1 in the case of CHP systems only refer to electricity or also to heat generation. The same applies vice versa for Section 4.10, where the focus is on the heat generation capacity of CHP systems. In addition, it must be clarified how funding is to be divided up in the event of a separate assessment under state aid law. In principle, the promotion of the combined heat and power generation should only be made possible by means of fixed surcharges, i.e. without a tender. Otherwise, at least the promotion of CHP systems with an electrical output of less than 1 MW should be regarded as a "small project" and an exemption for CHP systems with an electrical output of more than 50 MW should be introduced.

- Nb. 107: The statements made here must be questioned in several respects: On the one hand, CHP systems, which are in particular also used for heat generation, must ensure the security of supply with heat even in times when there is a surplus of other renewable energies. With an expected strong expansion of wind and PV power generation, these times will even increase, so that the use of systems for heat supply will become more and more uneconomical and investments in such systems will become more and more unattractive. This would entail that highly efficient cogeneration of heat and power would be substituted by more inefficient, separate generation of electricity and heat. On the other hand, biomass must not be seen as the “worse” renewable energy. Biomass power plants are approved in accordance with the statutory provisions on air pollution control and immission control and are therefore not "air polluters". The emitted CO_2 is taken up again by the growing biomass.

- Nb. 340: In addition to the positive effect of district heating / cooling on environmental protection and sustainability, the importance of the CHP / heating network systems for security

of supply with their important systemic and storage functions must not be neglected. CHP systems can operate and secure both electricity and heating networks. This should be entirely in line with the “energy efficiency first” principle with regard to sensible and economical use of resources.

- Nb. 347 a: In addition to the modernization of the district heating distribution network, its new construction must continue to be possible under the conditions mentioned. Heating networks are locally delimited systems in which the procurement of short-term equilibrium heat, for example in trade, such as in the electricity or gas sector, is not possible. District heating networks with a clear decarbonization path can only win new customers through new construction and make urban heating climate-neutral across the board in the long term. Networks must therefore be viewed independently of their generation. The use of CHP and heating plants that are operated with natural gas and heating oil must not have a negative effect on the promotion of the transformation of heating networks. For this reason, sub-item b is important, since the grids sometimes must be made fit first for the feed-in of renewable heat sources (temperature reduction, steam network conversion, ...).

- Nb. 349: It is imperative to refrain from general individual notification for aid from district heating and district cooling systems. Especially regarding the closed system of the district heating network, the additional hurdle of examining individual cases makes no sense in relation to the negative effects of the project on competition. A case-by-case examination alone will delay investments in the billions until 2030 or will often not be available at all, due to the uncertainties associated with the individual case notification.

When revising the CEEAG, the requirements of **planning security** and **reliability** as well as the **protection of trust** must be sufficiently taken into account. The considerable investment requirement for the implementation of measures to avoid greenhouse gas emissions, to secure the energy supply as well as in the area of district heating and district cooling requires **stable political and legal framework conditions for plant operators and investors**. Especially when projects have already been implemented or are specifically in the planning or implementation phase, the investment decision made must not be negatively influenced subsequently.