

GME NEWSLETTER – The new issue has been published

Rome 10 August 2023 – The new issue of the Gestore dei Mercati Energetici (GME) newsletter is online, downloadable from the website www.mercatoelettrico.org. The newsletter opens with a comment by Gian Paolo Repetto of the RIE on the state of the art and on the biomethane objectives. "European and national policies and regulations are trying to create a favourable context for the development of the biomethane industry, due to its importance as a contribution to the transition, for the reduction of dependence on non-EU energy sources, as an opportunity for the circular economy given the possibility of using organic waste, sewage sludge, agricultural waste and agri-food by-products for its production - explained the RIE analyst -. Similarly to other sectors involved in EU transition policies, the targets for biomethane are also extremely ambitious and not easily achievable, involving large capital investments, very favourable support conditions and the resolving of a number of critical issues". Regarding the numbers on the continental, at the end of 2022, "Europe had a total of 1,222 biomethane production plants, a marked increase in recent years, having almost doubled compared to 2017 (627). Production has recorded considerable growth in the last decade: the consolidated data for 2021 (latest available) indicate an overall output of around 3.5 billion m3, with an increase of 20% compared to 2020", highlighted Repetto. In Italy, more specifically, "the biomethane released for consumption in 2022 was 210 million cubic meters, equal to approximately 5% of total EU production and 0.3% of national natural gas consumption. Biomethane is used in the transport sector - recalled the RIE researcher -. Although volumes are still low - he added, however - the growth trend favoured by Italian Ministerial Decree of 2 March 2018 dedicated to the development of biomethane in transport is evident; in 2017, only 7 production plants were in operation". In fact, Gestore dei Servizi Energetici (GSE) reports that as of 31 December 2022 "45 biomethane plants were active, of which 13 new ones that began operating during the year, for a production capacity of 41,374 Sm3/hour, approximately 330 million cubic meters/year - Repetto stated -. From the processing of SNAM data, referring to the end of June 2023, there are 66 production sites connected to the company's transport network and another 20 connected to other transport networks or distribution networks, for a total assigned capacity of approximately 620 thousand cubic



meters/year". Furthermore, the SNAM database shows "another 100 plants, for a capacity of approximately 540 million cubic meters/year, which have requested connection and with accepted offer". Italy today can therefore also count on "approximately 2,260 biogas production plants for an installed capacity of 1,455 MW and a production of around 2.5 billion m3, which makes our country the second largest producer in Europe and fourth in the world (after Germany, China and the United States). Approximately 1,800 (79%) of these plants are agricultural for an installed capacity of 1,000 MW, while the remainder are linked to the waste sector (17%) and to the use of purification sludge as feedstock (4%)", underlined the RIE researcher. In short, the sector "although still modest in size, has good technological/industrial maturity and interesting growth potential; perhaps lower potential, but with fewer unknowns than other renewable sources, such as green hydrogen with which it shares the same category of 'renewable gas", admitted Repetto. Instead, the new PNIEC 2023, in line with the RepoweEU, also sets an ambitious production target for 2030 of 5 Mtoe of biogas and biomethane, equal to approximately 6 billion cubic meters, split between thermal (3.7 Mtoe or 4.5 bln m3) and transport (1.2 Mtoe or 1.5 bln m3). That is, around 9% of current natural gas consumption and almost double the national production from fossil sources in 2022 (3.3 billion m3). However, "the current trend of biomethane production obtained from operating plants (Italian Ministerial Decree of 2 March 2018) so far appears to be lower than an evolutionary scenario of gradual approach to the recently outlined objectives - recalled the RIE analyst -. Even though Italy has an important potential for the production of biomethane from anaerobic digestion and considering the conversion of part of the biogas plants (nevertheless small on average and widely distributed throughout the territory), the support framework for the sector must work well in order to achieve the objectives, which would correspond to going from less than 0.3% to 9% of national natural gas consumption in a space of relatively few years". But integrating biomethane into the existing gas network" also requires careful planning of projects and infrastructures, bearing in mind that the presence of many plants spread throughout the territory implies major investments to create new biomethane injection points and related transport/distribution networks. Biogas production is widely distributed and with rather modest plant sizes. In addition to this, it will be necessary to precisely monitor the trend of production costs and the profitability of investments to find a suitable balance between



incentive levels and economic sustainability of the entire support system", concluded Repetto.

The new issue also includes the usual technical comments relating to the national and European electricity and environmental markets and exchanges, the section dedicated to the analysis of the trends in the Italian gas market and the analysis section on the trends in Europe, which explores the trends on the main European commodities markets. The new GME publication also reports, as is now customary, the summary data of the electricity market for the month of July 2023.

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