

1st EBA Biomethane Investment Outlook

EBA is pleased to present its first investment outlook for biomethane, based on a partial response from the investors and project developers within the association. Their feedback shows that €18 billion has already been earmarked for investment in biomethane production, helping to deliver Europe's energy security and climate mitigation ambitions. One year ago, the REPowerEU target of 35bcm of sustainable biomethane production by 2030 was announced; the investment needed to reach this target is €83 billion, depending on the size and location of plants built or expanded, and the types of sustainable feedstock used. This first edition of the Biomethane Investment Outlook shows investment is on its way. €4.1 billion is due to be invested between 2023 and 2025, while a further €12.4 billion will be unlocked in 2026–2030 (Table 1). For a further €1 billion the timeframe is yet to be specified. This outlook will be updated regularly, integrating more data and highlighting additional investment.

Today, the EU produces 3.5 bcm of biomethane. Scaling-up to 35 bcm requires the mobilisation of sustainable biomass feedstock, mostly waste and residues, plus the construction of at least 5,000 new biomethane plants, depending on plant size. From a technical perspective this is feasible during the next seven years. However, matching policies, stable framework conditions and pathways for long term end-use are critical to securing the promised levels of investment.

Table 1: Level of investment for the timeframes 2023-2025 and 2026-2030

	2023-2025	2026-2030	Timeframe not specified
Investment	€4.1 billion	€12.4 billion	€1 billion

In this first analysis, the planned investments are primarily located in **France (€1.4 billion)** and **Italy (€1.1 billion)**, thanks to the favourable conditions put in place by the Governments of both countries. They are followed by the Netherlands (€951 million), Spain (€948 million), Germany (€658 million), Sweden (€635 million) and Poland (€429 million). A further €5.5 billion is reserved to be invested in the EU, although its precise destinations are still open. €3.3 billion will be invested outside the EU, including in the UK and Ukraine (See table 2 in next page).





Table 2: Destination of investments and amount per country

Destination of investment	Amount
France	€1.4 billion
Italy	€1.1 billion
The Netherlands	€951 million
Spain	€948 million
Germany	€658 million
Sweden	€635 million
Poland	€429 million
Finland	€330 million ¹
Ireland	€290 million
Greece	€150 million
Denmark	€140 million
Belgium	€38 million
Czech Republic	€25 million
Slovenia	€3 million
Europe, unspecified	€5.5 billion
Non-EU (including UK and	€3.3 billion
Not specified	€1.6 billion

The largest portion of investment (€16 billion) is planned for greenfield plants, whereas only €0.4 billion is destined for brownfields, including the conversion of biogas-CHP plants to biomethane production facilities. This shows that there is still ample room for growth in the brownfield subsector. Specific measures to promote brownfield investments are already in place in Italy (Biomethane Decree)² and Austria (Renewable Expansion Act)³.

The EBA members who took part in the Biomethane Investment Outlook report are aiming for compliance with the EU Taxonomy. Investors indicate that compliance with the EU Taxonomy is important to leverage green investments. At the same time, companies involved have also identified difficulties in implementing the screening criteria. Bringing the EU Taxonomy in line with the REPowerEU objective will certainly help the mobilisation of sustainable investments. 40% of the investors aim to use biomethane in transport; a further 35% indicate that their investment will target transport along with other end-uses, such as industry and heating.

¹ This is only a partial figure as the data for Finland only includes the timeframe 2023–2025.

² Source: 'Support schemes for biogas and biomethane in Italy' available to EBA members

³ Source: 'Support schemes for biogas and biomethane in Austria' available to EBA members



Most investors are planning to use a combination of different support systems, such as feed-in tariffs, feed-in premiums, quota or green certificate schemes, fiscal incentives, CAPEX support and market mechanisms, depending on the country. Unsubsidised projects are also on the table: for these in particular, a harmonised EU-wide cross- border trading system is of great importance.

Beyond energy

The promised investment will provide additional, system-wide benefits to the whole spectrum of society, worth up to $\[\in \]$ 7.9 billion⁴ per year. These include energy security, soil health, greenhouse gas emissions reduction, and supply of biogenic CO_2 , as well as improved waste management, job creation, replacement of synthetic fertilisers, sustainable rural development and the expansion of agroecology. Biomethane is the only renewable energy source that can provide all of these benefits. The societal rewards of biogas and biomethane production over the next seven years have a combined value of up to $\[\]$ 55 billion, depending on the substrates used.

Further possibilities for growth

The valorisation of biogenic CO_2 to replace products based on CO_2 of fossil origin is included in the business plans of the majority of the investors surveyed. CCU is the preferred choice, as biogenic CO_2 is a valuable commodity and its production can improve the economics of a biomethane production project. The importance of biogenic CO_2 in offsetting CO_2 of fossil origin is often underestimated, however; efforts should be made to assess its value fairly. A further significant use of biogenic CO_2 is in the production of green synthetic methane (using green hydrogen), which generates substantial additional volumes of sustainable green gas. The instalment of CCS and CCU technologies is also anticipated in existing biomethane plants, allowing them to capture all biogenic CO_2 generated.

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About the European Biogas Association (EBA)

The European Biogas Association has been the voice of renewable gas in Europe since 2009. EBA advocates the recognition of biomethane and other renewable gases as sustainable, demand-responsive and flexible energy sources that provide multiple socio-economic and environmental benefits. Supported by its members, EBA is committed to working with European institutions, industry, agricultural partners, NGOs and academia to develop policies that can enable the large-scale deployment of renewable gases and organic fertilisers throughout Europe, complemented by transparent, well-established sustainability certification bodies to ensure that sustainability remains at the core of the industry. The association today counts on a well-established network of over 200 national organisations, scientific institutes and companies from Europe and beyond.



⁴ Calculated with results from the EBA report Beyond energy – monetising biomethane's whole-system benefits (February 2023)