ACT

Demystifying Biomethane

What every European decision-maker needs to know

ACT ON IT.

Europe's path to net zero depends on solutions that deliver real, measurable impact — and biomethane is one of the most powerful tools available.

As a low-carbon, drop-in replacement for natural gas, biomethane can be injected directly into the existing grid. It offers a practical, scalable way for industries to cut emissions while keeping operations running smoothly. It's also central to the European Union's decarbonization strategy, backed by policies and incentives designed to accelerate its adoption.

But ambition alone doesn't make the market easy to navigate. Fragmented policies, national rule differences, and supply-demand imbalances create complexity, risk, and uncertainty. For decision-makers weighing compliance costs and long-term strategy, the question isn't whether to adopt biomethane. It's how to do it with confidence.

This report explains what makes biomethane unique, what's driving its rapid adoption across Europe, and how to build a procurement strategy that balances long-term supply with short-term flexibility. In short, it's a guide to understanding the market — and taking action with clarity.

About ACT

ACT develops and provides comprehensive and innovative environmental solutions that empower businesses globally to act on and achieve their environmental goals efficiently and transparently — no matter how ambitious. Since 2009, over 9,000 clients have chosen ACT as their strategic decarbonization partner, leveraging our extensive global environmental regulation, market, standard, product, and technical expertise to deliver the results they need to hit their targets.

From renewable fuel to compliance tool

Biomethane is produced through the fermentation of organic matter and can be injected directly into the existing gas grid as a one-for-one natural gas alternative. With significantly lower CO_2, CH_4, and N_2O emissions — and in some cases even negative emissions, such as in manure management — it's a renewable energy source and a powerful decarbonization tool.

More importantly, biomethane is a compliance and cost-management instrument that the EU is actively promoting to ensure the continent's energy independence. Under the REPowerEU Plan and RED III, the EU has set a target of 35 billion cubic meters of biomethane production annually by 2030.

For companies, that makes the direction clear, and demand is increasing faster than supply.

COMPLIANCE MARKETS

Cut costs and meet mandates

Several pieces of legislation are increasing the demand for biomethane. Companies can use biomethane to reduce or eliminate their EUA obligations, meet RED III targets, and adhere to national schemes.

VOLUNTARY MARKETS

Deliver credible Scope 1 reductions

Corporations are using biomethane certificates to credibly report Scope 1 emissions as zero. This strengthens ESG performance and demonstrates transparent action on net-zero commitments.

The road to adoption is far from simple

The opportunity and desire may be clear, but adoption isn't as straightforward. Companies that want to transition to biomethane face four key challenges in getting there. For many companies, these barriers delay action. But in a market where regulatory pressure is only increasing, that waiting can come at a cost.

Cross-border trade

A lack of harmonization across national rules makes cross-border biomethane trade complex. Iin some countries, it isn't permitted at all. Where allowed, cross-border trade can happen in two main ways:

TRANSFER HUBS

The European Renewable Gas Registry (ERGaR) and the Association of Issuing Bodies (AIB) facilitate the transfer of Guarantees of Origin (GoOs) between participating national registries, allowing certified biomethane to move across borders.

EX-DOMAIN CANCELLATION

In this case, a GoO is cancelled in its domestic registry and recorded as consumed in another country. This process usually depends on bilateral agreements between the relevant national registries.

Voluntary market uncertainty

Unclear guidance from the GHG Protocol — the world's most widely used greenhouse gas accounting standard — and ongoing debates over how GoOs should be treated are creating audit and reporting risks for companies using biomethane in voluntary claims.

Supply-demand imbalance

Demand continues to outpace production. Biomethane remains more expensive than fossil natural gas, and contracting structures are often complex. With producers and buyers operating under different incentives, negotiations can be difficult to align.

Contracting complexity

Policy uncertainty means investment uncertainty. Unclear reporting requirements make harder to secure long-term Biomethane Purchase Agreements (BPAs).

What's driving supply, demand, and price in Europe?

The European biomethane market is expanding fast, but maturity and opportunities differ across countries. For companies considering biomethane, it's vital to understand supply, demand, and pricing.

The supply of biomethane is growing

The number of biomethane plants across Europe is on the rise. France leads with nearly 191.000 operating facilities, followed by growth in Germany, Italy, and Denmark.. In other countries like the United Kingdom growth has stalled due to market uncertainty.

Investment is also accelerating. According to the European Biogas Association, total biomethane investment is projected to increase by around €1 billion in 2025 compared to 2024, signaling continued confidence in the sector's expansion.

COUNTRIES WITH THE LARGEST BIOMETHANE INSTALLED CAPACITIES (in Nm³/hour)

	2025		2024		2022
France	190,711	Germany	147,749	Germany	147,711
Germany	157,258	France	132,818	United Kingdom	107,029
Italy	99,658	United Kingdom	114,358	France	87,691
United Kingdom	93,151	Italy	97,757	Denmark	70,105
Denmark	85,142	Denmark	85,117	Sweden	45,421

Demand for biomethane is growing faster

New regulations, decarbonization targets, and compliance obligations are driving more companies toward biomethane—especially in the utilities, industrial, and transport sectors, where tightening rules are forcing faster action.

Voluntary demand is also accelerating. In hard-to-electrify sectors such as heavy industry and logistics, companies are turning to biomethane to cut Scope 1 emissions and reduce their exposure to rising EUA costs.

Contracts are competitive

Demand is outstripping supply. Long-term Biomethane Purchase Agreements (BPAs) are increasing in demand, and competition will only intensify as RED III targets take effect.

Prices are driven by policy

Biomethane trades at a premium to natural gas, and prices are largely shaped by policy obligations. Companies that move early are already securing long-term contracts to lock in cost certainty.

The regulations shaping biomethane demand

Several key pieces of legislation are shaping biomethane's production and demand.

REGULATION / POLICY	KEY PROVISIONS AND IMPACT ON BIOMETHANE
EU Fit-for-55	A cornerstone EU policy package designed to cut net greenhouse gas emissions by at least 55% by 2030 compared to 1990 levels. Fit-for-55 sits at the core of the European Green Deal and underpins the EU's goal of reaching climate neutrality by 2050.
Renewable Energy Directive (RED III)	Sets a binding EU target of at least 42.5% renewable energy by 2030. In transport, it requires a 29% renewable energy share or a 14.5% greenhouse gas reduction, along with a combined 5.5% mandate for advanced biofuels and renewable fuels of non-biological origin (RFNBOs). Together, these measures create legally binding demand for biomethane across the European transport sector.
EU Emissions Trading System (EU ETS)	As carbon allowance (EUA) prices rise, biomethane is becoming an increasingly cost-effective compliance solution — particularly in the transport and building sectors. Certified biomethane carries a zero-emission factor, enabling companies to cut EUA obligations and reduce overall compliance costs. The upcoming EU ETS2, due to take full effect in 2027, is expected to drive demand even higher.
FuelEU Maritime	Sets GHG intensity reduction targets for the shipping industry. Biomethane helps liquid natural gas (LNG) vessels meet these targets, generate tradable emissions reductions, and benefit from EUA price advantages.
National Schemes	Member States can set their own policies, including national blending obligations that require gas suppliers to purchase a share of biomethane relative to their natural gas deliveries. The Netherlands, France, and Ireland are among the countries expected to introduce such mandates.

How the voluntary market is changing

Companies with ambitious net-zero targets are increasingly turning to biomethane as a credible way to cut direct emissions. In sectors where electrification isn't yet practical, it's becoming a critical part of corporate decarbonization strategies.

Scope 1 reductions

Many organizations now use biomethane Guarantees of Origin (GoOs) to report Scope 1 emissions as zero. This helps them meet internal decarbonization targets and demonstrate credible ESG performance.

Hard-to-electrify sectors

Manufacturing, logistics, and heavy transport depend on biomethane as a realistic alternative where electrification remains out of reach.

But rapid growth is bringing new scrutiny.
Buyers are paying a premium for biomethane that demonstrates additionality — that is, it contributes to new renewable capacity. At the same time, cross-border demand is straining Europe's fragmented registry system and testing verification frameworks.

Choose the right procurement model

Organizations can source biomethane in different ways. Each option carries implications for cost, compliance, and complexity.

UNBUNDLED

Certificate-only

Companies purchase Guarantees of Origin (GoOs) separately from the physical gas they consume. When trading volumes are certified under schemes such as ISCC, best practice is for each party in the transaction to take legal possession of the gas to maintain the chain of custody. In those cases, the physical gas is typically bought and sold by an intermediary or third party.

BUNDLED

Physical delivery

Biomethane is delivered through a pipeline or local injection point and bundled together with GoOs. This offers direct physical supply but is less flexible and usually more expensive.

Contract choice can also make or break your procurement success. Companies must weigh price risk, compliance needs, and market volatility.

Spot vs. long-term contracts

Spot market purchases offer flexibility, but in a tightening market, long-term Gas Purchase Agreements (GPAs) provide price stability and supply security. RED III encourages long-term deals to de-risk new capacity investment.

Local vs. international sourcing

Local supply can simplify compliance, but fragmented production means international sourcing is often necessary. Cross-border procurement requires expert navigation of registry and regulatory differences. In some cases, it may not be allowed.

The right procurement model depends on your company's risk appetite, compliance needs, and long-term strategy. Choosing well can reduce exposure, stabilize costs, and build resilience.

Three rules for smarter procurement

To turn biomethane from a compliance requirement into a strategic advantage, organizations should focus on three priorities:

01.

Insist on traceability

Credible biomethane claims rely on clear, transparent documentation. Build robust internal systems to track and verify every transfer to reduce audit risks. Sourcing biomethane certified under RED III-aligned schemes such as ISCC, REDcert, or national registries adds an extra layer of assurance.

Uncertified volumes can also play a role in a balanced strategy, offering more affordability while maintaining environmental impact — but these require expert sourcing and careful management.

02.

Balance flexibility with certainty

Take a portfolio approach. Combine long-term contracts to secure supply and price stability in a tightening market, and use spot purchases to stay agile. The right mix protects against volatility while keeping operations flexible.

03.

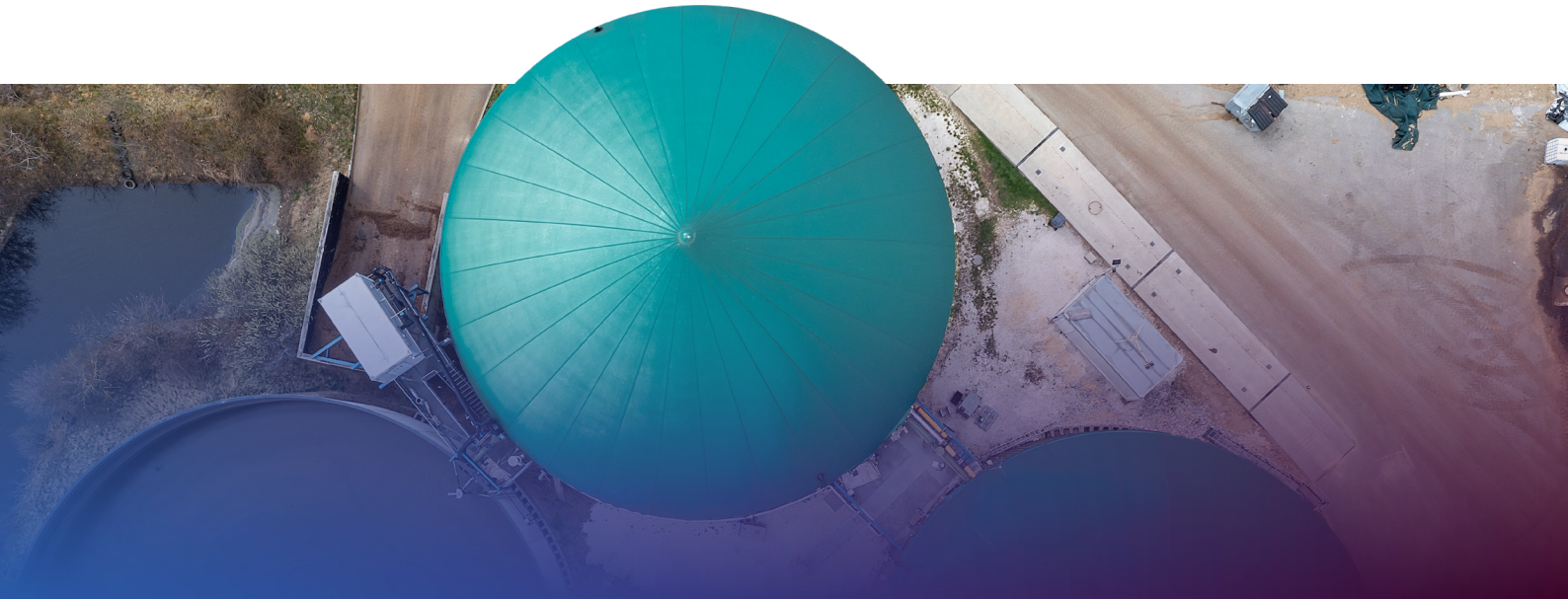
Work with experienced partners

Biomethane procurement involves multiple registries, evolving regulations, and cross-border risks. An experienced partner will help you avoid costly missteps, stay compliant, and secure supply with confidence.

Why leading companies choose ACT

The European Union is betting big on biomethane — and putting pressure on companies to follow suit. Early movers will ensure supply in a tightening market and strengthen their position in the transition to net zero.

Biomethane procurement requires more than certificates. It requires expertise, foresight, and the ability to execute across borders and regulatory systems.



ACT brings

Deep registry knowledge

Active across AIB, ERGaR, EBA (European Biogas Association), WBA (World Biogas Association), and EU Commission working groups, we manage complex cross-border transactions and ensure compliance with evolving rules.

End-to-end execution

From sourcing strategy to administration, ACT handles the complexity so you can focus on core operations.

Risk management

Our experience in both compliance and voluntary markets enables you to balance flexibility with certainty, securing volumes at competitive terms while staying audit-ready.

With 15+ years of leadership in environmental markets and more than 9.000 client partnerships worldwide, ACT is the trusted partner for organizations ready to move decisively on biomethane.

Secure your biomethane advantage today.

Join the 9.000+ businesses already working with ACT.
Contact our experts today at info@actcommodities.com

ACT ON IT.

ACT

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