Clean Industrial Deal

Position Paper

28 February 2025

A Holistic Approach for an Inclusive, Resilient, and Cost-Effective Industrial Energy Transition

The **Clean Industrial Deal** has the ambition to mark a significant step towards **Europe's industrial decarbonisation**. However, **GD4S** believes that **a truly resilient, competitive, and technology-neutral transition** requires a **holistic energy system approach**. A **one-size-fits-all electrification strategy** is insufficient to ensure **energy security, affordability, and industrial competitiveness**.

The European Union's energy transition **must integrate renewable gases and existing infrastructure** to support **energy-intensive industries, ensure grid stability, and provide flexibility in buildings and mobility**. This **position paper** outlines GD4S's key recommendations to unlock **a fast, cost-efficient, and inclusive energy transition**.

1. An Integrated Energy System for Industrial Competitiveness

Renewable Gases: An Untapped Resource for Decarbonisation

- Biomethane is already available and can significantly reduce industrial CO_2 emissions while enhancing Europe's circular economy and energy independence.
- According to the European Biogas Association (EBA), biomethane production could reach 101 bcm by 2040, covering over 80% of the EU's gas demand.
- Green hydrogen strengthens gas networks, enabling the conversion of excess renewable electricity and ensuring long-term energy storage.

Ensuring Industrial Competitiveness

- Energy-intensive sectors such as steel, chemicals, ceramics, and glass require stable and affordable high-temperature energy—a fully electrified system cannot meet these needs alone.
- Gas distribution grids ensure reliable supply to the industrial sector, particularly when renewable electricity generation fluctuates due to weather conditions.
- Gas networks facilitate industries' gradual transition from fossil fuels to renewable gases, ensuring a cost-effective shift while reducing the need for extensive and costly electricity grid upgrades.

Recommendations for policymakers

✓ Recognise **renewable gases within emissions trading systems (ETS)** and support their production with **financial incentives.**
✓ Ensure **a stable and cost-effective energy supply**, integrating **renewable gas infrastructure alongside electrification**.

2. System Flexibility: The Key to an Affordable and Secure Transition

Leveraging Gas Infrastructure for Energy Security

- Europe's seasonal heating demand remains a challenge—gas networks provide 1,100 TWh of storage, ensuring stability during cold snaps and Dunkelflaute periods.
- Expanding electricity networks to handle seasonal peaks would require decades and massive investments, while gas infrastructure is already available and cost-effective.
- Renewable gases (biomethane, hydrogen) ensure dispatchable energy storage, preventing wasted renewable electricity and supply shortages.

Demand-Side Flexibility: A Missed Opportunity in the Clean Industrial Deal

- Industrial and building demand flexibility must be prioritised, as it is the only solution to balance cumulative energy stress during extreme conditions.
- Hybrid energy systems—which integrate electricity with renewable gases—offer more stability than standalone electrification.
- A dynamic tariff system rewarding demand-side flexibility would encourage industries and consumers to adjust their energy consumption in response to grid needs.

Recommendations for policymakers

✓ Implement **market mechanisms** that value **demand-side flexibility**, ensuring **cost-effective energy use**.
✓ Support **hybrid heating systems in buildings** to allow consumers to switch between **gas and electricity** based on availability and price.
✓ Recognise **gas networks as a strategic flexibility provider**, reducing **pressure on electricity grids** and **ensuring stable energy supply**.

3. A Pragmatic Approach to Renewable Gas Market Development

Making Renewable Gases Accessible Through Market-Based Tools

- Industries and households need transparent access to renewable gases, ensuring a steady demand and investment certainty.
- GD4S supports a simple invoicing system specifying the renewable gas share, allowing consumers to track and prove their contribution to decarbonisation.
- National blending obligations and financial incentives should be implemented to scale up biomethane and hydrogen production.

Recognising Renewable Gases as a Pillar of the Transition

- Biomethane and hydrogen must be explicitly integrated into all EU decarbonisation frameworks, alongside electrification.
- EU targets must be more ambitious, aiming for at least 35 bcm of biomethane and 10 million tonnes of green hydrogen production by 2030.
- Biogenic CO_2 valorisation (through Carbon Capture and Utilisation - CCU) should be incentivised as part of the circular economy.

Recommendations for policymakers

✓ Implement **blending obligations** to encourage renewable gas adoption across industries and households.
✓ Ensure **renewable gas certification systems** are recognised within **EU emissions trading and sustainability frameworks**.
✓ Support **public-private investments** in **biomethane and green hydrogen infrastructure**.

Conclusion: A Call for a Balanced, Inclusive, and Resilient Energy Transition

GD4S **welcomes the Clean Industrial Deal** but urges policymakers to **adopt a more inclusive approach** that fully integrates **renewable gases, flexibility solutions, and existing infrastructure**.

- A pragmatic and technology-neutral strategy is essential to maintain industrial competitiveness and ensure energy security.
- Renewable gases must be explicitly recognised as key solutions in EU policies.
- Flexibility in both demand and supply must be incentivised to balance the grid efficiently and affordably.

GD4S stands **ready to collaborate with policymakers, industry leaders, and stakeholders** to implement a Clean Industrial Deal that **delivers a fast, resilient, and cost-effective energy transition** for all Europeans.