

Interview Jean-Marc Leroy, President Gas Infrastructure Europe: “Green gas is paramount for us, but we are still in experimentation phase”

by Sonja van Renssen

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Jean-Marc Leroy president Gas Infrastructure Europe

The European gas sector has woken up to the narrative potential of green gas. But where the power sector has already embraced 100% decarbonisation, the gas sector is still in an “experimentation phase”, says Jean-Marc Leroy, President of Gas Infrastructure Europe (GIE) and head of gas for Engie, in an interview with Energy Post. Leroy explains why he’s not worried about stranded assets, why the European energy system should take “collective responsibility” for gas storage and how he sees the future of hydrogen.

Gas is part of the optimal energy mix that keeps energy affordable. That's the the starting point for the European gas sector. In an interview with Energy Post, Jean-Marc Leroy, President of Gas Infrastructure Europe (GIE) and head of gas for Engie, argues that renewables will need gas for storage, no matter how batteries develop. But yes, this gas will have to go "green", he is quick to acknowledge. That could be through biomethane, synthetic methane or hydrogen, or carbon capture and storage (CCS) or carbon capture and use (CCU), he says.

The European gas sector today is still "at the experimentation phase" when it comes to decarbonisation however, Leroy admits. Unlike the power sector, it has not yet pledged to decarbonise. Certainly, green gas is "paramount" for GIE's members. It's just that security of supply remains the immediate priority for some, notably in Central and Eastern Europe. There, in any case, natural gas allows for quick wins vs. coal in power and diesel/petrol in transport, GIE's President adds.

Leroy was speaking to Energy Post in Bucharest, Romania, in the immediate aftermath of GIE's annual congress on 14-15 June. Countries like Romania have all the elements in place to develop green gas, it's just not a priority yet, Leroy argued.

GIE's President is not overly concerned by the risk of stranded assets. Europe aims to fully decarbonise by 2050 – that's 32 years from now, by which time "a lot of pipes will be fully amortised" he says. The big question is how to adapt existing pipes to future needs: "Should we build 100% hydrogen pipes? Should we develop new mixed pipes for hydrogen and gas?" Leroy sees "real interest" in hydrogen but admits that people believe it is something "for the future". Now is the time to innovate and prepare for its mass arrival in the 2030s, he says.

GIE represents gas Transmission System Operators (TSOs), gas storage system operators and LNG terminal operators. Leroy was CEO of Storengy, Engie's underground gas storage operator, from 2009-15. No surprise then that he has a clear vision on storage.

Even with 'Energy Efficiency First', Europe will still need to manage peak winter demand, he argues. Gas storage needs to become "a collective responsibility" that rewards its system optimisation and "insurance" value, as well as market value. All beneficiaries – including the power sector – should contribute to its costs.

Leroy hopes that the EU's announced [gas market reform](#) in 2020 will introduce a "holistic" vision for the energy system as well as a pathway to green gas. GIE, whose [conference](#) this year was a lavish affair complete with a wedding-like gala dinner at a former palace of the Soviet-era leader Nicolae Ceaușescu, is trying to broaden its reach beyond gas infrastructure operators to host this debate on the future of gas.

Q: What are the big topics for GIE today?

A: We have to adapt our business to the energy transition in Europe. We have to work on synergies with others in the energy community, break the silos. The goal is optimisation. For example, we have to optimise costs for the consumer. The main challenge is not to destroy competitiveness by having too high an energy price. At the same time, we have to limit CO2 emissions.

We have to find the mix that allows us to take the best of all kinds of energy. Renewables are very cheap to produce but intermittent. Massive storage will be difficult to achieve with batteries, even if they make a lot of progress.

Gas is easy and cheap to transport over long distances and store, and – this is often forgotten – the most efficient way to heat in winter. It has only one inconvenience: even if it is the cleanest fossil energy by far, it is still fossil energy. So we have to put forward decarbonisation solutions, either for production – biomethane, synthetic gas or hydrogen – or for use – carbon capture and storage (CCS) or carbon capture and use (CCU).

Q: The general feeling in Brussels is that the gas industry is getting ready to commit to decarbonisation but is not quite there yet. Do you agree?

A: I think it's partially true but only partially. Europe is covered in biomethane projects. There are also more than 20 power-to-gas projects. But we are still at the experimentation phase.

We have to scale up. We have to develop an industrial sector dedicated to these kinds of products in Europe. It's not only an energy project, it should be a European project. After that, we'll be able to export worldwide. It could be the new Airbus but for energy.

Q: How important is green gas in the overall picture of what you're working on?

A: I think we can say that for all GIE members green gas is paramount. What we have some differences on in the organisation is the rate and trajectory to go to 100% green gas. Some countries are very active, such as France. But in other parts of Europe security of supply is the most important issue. Once that is solved, we can talk about greenification there.

Very important is that we develop the flexibility to more easily transport biomethane or use Guarantees of Origin (GOs), so that achievements in one country can be used to supply green gas to another country.

Q: Do you see any appetite for green gas in Central and Eastern Europe today? Could it help deliver better security of supply there?

A: There are two things to remember. One, decarbonisation in the first place means replacing very polluting solutions with cleaner, less polluting solutions – even if there are still some CO₂ emissions. That's the main challenge in this part of Europe, where you still find a lot of coal power plants and highly polluting transport.

The first thing is to get quick wins and (natural) gas allows for that. After that, the gas can become greener.

Look at Romania: it's a very important agricultural country and very experienced in gas – it was a frontrunner in oil and gas in Europe a hundred years ago. Its people are well educated, especially in digital. All the elements are there [for biogas and hydrogen development] – it's only a question of priority.

Q: Are you worried about stranded assets?

A: What is easily avoidable through discussion with regulators and policymakers – and the market! – is useless assets. But we are entering an energy transition that will probably last 30-40 years. Even the most ambitious countries such as France are aiming for full decarbonisation by 2050. That's 32 years away. At this stage, a lot of pipes will be fully amortised.

The question is how we adjust these existing pipes. Should we replace them by new gas pipelines? Should we build 100% hydrogen pipes? Should we develop new mixed pipes for hydrogen and gas? And should those pipes run to the end-consumer or should we use membrane technology to separate gas and hydrogen at the consumer's door? Technically there are a lot of options.

Q: Do you think policymakers are paying enough attention to hydrogen?

A: There is real interest. But people see it as something for the future. No one says it's crazy, but we have to work to build confidence and bring down costs. There is a lot of room for improvement. The price decreases for green hydrogen are comparable to what happened in the PV sector – and it's only the beginning.

I think it's important to point out too that projects are happening not only at national level, but in communities and regions – look at the

H21 Leeds Citygate Project or the Auvergne-Rhône-Alpes Zero Emission Valley.

Q: How fit for the future is the existing gas infrastructure?

A: Perfectly fit. Because we will not see a very brusque change. I see hydrogen coming massively in the 2030s. Between now and then we have to tackle issues such as 'how much hydrogen can you put in a distribution pipe?' Today there is a global consensus that this is around 20%. But you have to stay within the gas specification for consumers.

In the transmission system, there are two constraints. First, a steel constraint. There are lots of different pipes. We have to assess for each kind of steel how far we can go and what can be done to inject more. But some consumers are also very sensitive to the hydrogen ratio in the gas supply because it's important for their process. If we go higher than what they can accept we have to invent processes allowing them to adjust.

GIE wants to provide a platform for this kind of discussion with all stakeholders, not just infrastructure operators.

Q: To what extent do we need to build new gas infrastructure vs. maintaining/upgrading existing assets?

A: Remember that some countries joined the EU in the 1960s, others in the 1990s or even this century. It's obvious that the first, founding members have had time to integrate their systems. But in the newer countries, there is still some work to do.

In the older member states it's primarily about maintaining the existing system e.g. replacing some pipes, or adjusting to reverse flows or new LNG terminals. In the part of Europe where we are today however, it's also about developing interconnectors and making sure countries do not depend on one source [ed: Russia] for gas. It is astonishing and satisfying to see the large number of projects for better market integration and cooperation in this region.

Q: Do you see an opportunity for the EU to better value gas storages in its upcoming gas market reform?

A: I remind you that the best way to avoid CO2 is to not use energy. The bigger market in Europe as far as energy is concerned will be energy savings. But we will still need to manage winter peak demand. And that is something that should bring us from the logic of volume to the logic of capacity.

Storage is by definition a capacity tool. Today it is not valued as it should be. It [gas in storage] has several values: a market value, a system optimisation value (not taken into account in most countries so far) and an insurance value. Having some gas under your feet is the best way to be sure you will have gas to heat in winter. First Italy and now France have rethought the storage business model to take into account these three components of value. It is up to other member states to do the same.

We are ready to adapt to the market, but if we go too far, if there are too many closures, then it could become a “regret” option. Look at last winter: some countries had a lot of stress due to the cold peak.

We should take collective responsibility [for gas storage]. We could globalise the cost and share it across all the people who benefit. Yes, that could include the power sector. Today the most efficient advocates for [gas] storage are electricity companies. Because they know they need it for backing up their back up.

Q: What do you expect from the EU’s gas market reform more broadly?

A: We hope for a global vision. Whether it’s called sector coupling or something else, we need a holistic vision. We need to break the silos in energy, regulatory authorities and in the European Commission. Second, we need to enable the development of innovative solutions and the progressive acceptance of more green gas in our network.

Q: Is the gas industry ready to commit to a carbon-neutral gas grid by 2050?

A: Everyone is ready to push for these kinds of solutions. But it will not be at the same pace in all of Europe. It all depends on your point of departure. France already has a very decarbonised energy mix thanks to nuclear, for example; its starting point is not the same as for Germany. Each country will apply the same kinds of solutions, but not at the same time or in the same way.

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