

Contribution of the French gas association to the energy transition debate

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The French gas association

> About us

AFG, which was founded in 1874, is a professional society that represents the French gas industry (natural gas, biogas and LPG). Its Chairman is Jérôme Ferrier and its Managing Director is Georges Bouchard.

It promotes the industry's activities by:

- acting as its representative vis-a-vis the public authorities and assisting in the establishment of legislation and regulations,
- participating in international projects,
- carrying out studies through its seven commissions,
- distributing information via different media,
- and providing specialised services (standardisation, certification, training).

It includes a wide range of organisations - diversified or specialised, French- or foreign-owned, operating in the global, national or local market - as well as individual members.



> 7 full members



> 27 associate members



> Around 1000 general members

1. On the target to reduce energy consumption by 50% by 2050

AFG is in favour of an ambitious but realistic policy to reduce energy consumption. Therefore it is in favour of setting a target to reduce energy consumption by 2050, under the following conditions:

- The target must be consistent with the objectives of the European energy policy and with those of our main partner countries: should the target differ substantially, an impact study must be carried out before it is approved or adjusted.
- The target must be compatible with the need to boost economic growth and competitiveness: this must be verified when the target is set and then from time to time, according to changes in the economic environment.
- The target must be established and measured in terms of primary energy, which is the only way to effectively take into consideration all the different energy chains: a final energy target would give the advantage to energy chains that, while efficient at the use stage, are inefficient in the upstream sector and are thus likely to increase the overall consumption of resources.
- In order to meet an ambitious target, considerable changes must be made in two highly energy-intensive industries: construction and transport. These changes will need a strong and lasting commitment from the public authorities, including a financial commitment.
- Such an ambitious target could require substantial investment, the return on which may be slow, especially in the construction industry. It therefore requires:
 - a healthy economic and financial environment, able to make the extra effort;
 - a favourable and stable legislative and regulatory framework;
 - optimised programmes and operations.

Requirements in terms of legislation

- **Introduce a flexible system for monitoring and managing the reduction of energy consumption, allowing for the changes that may become necessary if the criteria for success are not fully met.**

2. On the target to reduce fossil energy consumption by 30% by 2030

With regard to the reduction of fossil energy consumption by 2030, AFG would like to see a range of different targets to take into account the specific characteristics of each energy source.

Why is gas different to other fossil fuels?

- Because it is the only one to offer all of the following advantages:
 - it is very abundant (if unconventional gas is included, there are enough reserves to last for at least two hundred years);
 - it is highly efficient to use (the gas chain is one of the most efficient in terms of overall yield);
 - it presents significant environmental advantages [not only is gas often the most cost-effective way of reducing carbon dioxide (CO₂) emissions, but it also enables the significant reduction - or even almost complete elimination - of pollutant and particle emissions];
 - it can be stored and is available all over the country;
 - it is competitive (as evidenced by a number of independent studies);
 - the infrastructure used for gas can be adapted for renewable resources.

What advantages does gas have over other energy sources?

- Gas is highly suitable for intensive and seasonal use: it can be stored and transported at high pressures and at a moderate cost; it emits no sulphur dioxide (SO₂) or particles at all and only very low levels of CO₂ and nitrogen oxides (NO_x).
- Gas is the ideal complement to renewable energy sources:
 - it is able to offset the intermittent nature of electricity generation from renewable sources, through the use of combined cycle power plants;
 - natural gas and gas infrastructure are directly compatible with biogas;
 - in the longer term, converting excess renewable electricity into gas ("e-gas") could introduce greater flexibility into the power grid since gas, unlike electricity, can be stored.

Concrete examples

- In the transport sector, using fuel gas reduces CO₂ emissions and improves air quality (no particles and almost no NO_x). It is a more cost-effective option, which is being developed by vehicle manufacturers all over the world.
- In the industrial sector, gas contributes to the fight against global warming while making companies more competitive.
- In the construction industry, the use of gas combined with renewable sources like solar power ensures optimal cost and energy efficiency.

Requirements in terms of legislation

- **Set different targets for different energy sources.**

3. Energy fiscal policy

Energy fiscal policy should facilitate the achievement of energy policy objectives (competitiveness and environment protection) and promote fair competition between energy sources while taking into account the long lead times in the energy sector.

What should energy fiscal policy aim to do in the future?

- It should help reduce energy consumption and should therefore focus on primary energy (a policy focusing on final energy would give the advantage to energy chains which, while efficient at the use stage, are inefficient in the upstream sector. It would therefore be unfair and, as a result, counter-productive).
- It should help reduce CO₂ emissions:
 - by considering emissions generated throughout energy chains, not just at the end-use stage;
 - by ensuring that renewable energy sources are no longer subject to taxes based on carbon content.
- It should consider all the main environmental impacts of energy sources, in addition to CO₂ emissions: pollutants and particles, waste production.
- It should preserve the competitiveness of the French economy and therefore be consistent with policy adopted in other countries, especially in Europe.
- It should not place a prohibitive burden on domestic consumers.
- It should not allow for transfers between energy sources, which distort competition to the detriment of consumers.
- It must take into account the long lead times in the energy sector and therefore be stable enough to give investors the long-term visibility they need (including individual investors, companies, producers and consumers).
- It must be consistent with other public policies. Thus the CO₂ price used to set carbon taxes must be in line with that used in the EU emissions trading scheme (ETS).

Requirements in terms of legislation

- **Before adjusting the rates, submit a report to Parliament detailing the impact of the current energy fiscal policy on the competitiveness of the French economy and on the economic position of households (particularly those in precarious circumstances).**
- **The rate of taxation imposed on different energy sources must be reasonable, consistent and fair. It should be based on both CO₂ emissions and on primary energy consumption.**
- **The CO₂ price used to set carbon taxes must be in line with that used in EU emissions trading scheme to ensure consistency and equality between different consumption sectors and to make sure that there is no threshold effect. It should also protect the competitiveness of gas-intensive industries.**
- **Fine particle emissions - measured according to European standards - should be included as a criterion in the system for taxing or rewarding vehicles based on their CO₂ emissions.**
- **It should ensure that renewable energy sources like biogas and bioNGV are no longer subject to existing taxes based on carbon content.**

4. The biogas industry

AFG would like the energy transition law to promote and support the development of cutting-edge industries like the biogas industry.

What is biogas?

- Biogas results from the methanisation of organic matter (biological household waste, agri-food industry waste, agricultural effluent, sewage sludge, etc.). It can be used directly in cogeneration plants or purified to natural gas quality (in which case it is referred to as biomethane).
- Biogas is a renewable gas, which is fully miscible with natural gas and is already being injected into gas grids.

What are the advantages of biogas?

- **As a source of renewable energy**, biogas allows for:
 - the reduction of greenhouse gas emissions through the recycling of waste and effluent at the point of generation;
 - the replacement of chemical fertilisers by natural fertilisers (digestate, a solid by-product of biogas production);
 - an increase in decentralised renewable energy production and the achievement of France's objectives for 2020: 23% renewable energy in final energy consumption and 10% in transport.
- **It creates jobs that cannot be relocated:** biogas is produced in decentralised facilities, from waste. Biogas production contributes to local development and can play a very significant role in the large-scale implementation of a circular economy.
- **It does not require large-scale grid investments:** renewable gas can be produced using existing gas infrastructure, so large-scale investment - which is fraught with consequences - is not needed.

What is the future of biogas?

- **Extensive agricultural and agri-food production** generates a great deal of waste and, therefore, significant potential for methanisation. Other forms of biological waste are also available, including household waste and sewage sludge.
- **The use of biogas could be increased all over France** by injecting it into the natural gas grid. In areas not serviced by the natural gas grid, it could be injected into propane-air systems. It could also be upgraded on site into biomethane fuel.

Requirements in terms of legislation

- **Incorporate ambitious but realistic biogas development objectives** - around 20 TWh by 2020 - into the national renewable energy action plan (PNA EnR).
- **Authorise the injection of biogas into propane-air systems.**
- **Always include an assessment of methanisable waste deposits in energy planning projects:** regional air, climate and energy plans (SRCAEs), regional climate and energy plans (PCETs), etc.

5. New emerging industries

Gas is a very promising source of energy for the future, which could reap long-term benefits from the development of new industries.

What are the most promising industries for the future?

- **Methanisation:** the anaerobic fermentation of a fermentable biomass. This biomass, which is currently composed of waste, could in the future consist of purposely-cultivated micro-algae.
- **The gasification of ligno-cellulosic biomass** (wood, straw, etc.): partial oxidation at a high temperature to produce synthesis gas, which is then methanised and purified to natural gas quality.
- Lastly, **the production of hydrogen by electrolysis**, using renewable electricity. The hydrogen can be upgraded by injecting it into the natural gas grid - either “as is” or following recombination with CO₂ - to produce synthesis gas. This process is known as power-to-gas and leads to the production of “e-gas”.

What assets can France draw on to develop these industries?

- The processing of fodder from permanent meadows offers **further potential for methanisation**, as does the sowing of secondary crops for energy production purposes. The latter do not restrict the growth of primary crops for human consumption.
- **Additional potential for methanisation lies in the development of micro-algae technologies** within the green chemistry and animal foodstuffs industries, and even in other sectors of the economy. According to a study conducted in 2013 by the Ministry of the Environment, Sustainable Development and Energy (MEDDE), the Ministry of Economy and Finance (Minefi), the Ministry of Agriculture, Food and Forestry (Maaf), the Environment and Energy Management Agency (Ademe), GrDF and GDF Suez, the amount of electricity produced in this way could reach around 10 TWh by 2020 and 20 TWh by 2050.
- **The above study also points out the high potential for gas generation from forest production and from ligneous agricultural waste products.** It estimates that the amount of electricity produced in this way could reach around 100 TWh by 2020 and 200 TWh by 2050.
- **Prospective scenarios focusing on the Factor 4 target (négaWatt 2011 and Ademe 2012)** estimate that, by 2050, 20 to 30 TWh of electrical energy could potentially be stored by converting it to hydrogen or synthetic methane, using **power to gas technology**.
- In its scenario, Ademe argues that half of the gas distributed through gas grids could come from renewable sources by 2050.
- On 24 April 2013, five European gas transmission system operators, including GRTgaz, signed an agreement to update the grids so that they are able, if necessary, to handle gas sourced completely from renewable resources by 2050.

Requirements in terms of legislation

- **Update innovation subsidy programmes to include renewable gas**, in order to promote the development of high-potential, high value-added activities such as gasification, micro-algae technology, methanisation and the injection of hydrogen into existing natural gas grids.
- **Enact into law the implementation of an action plan to develop gas grids capable of transporting gas sourced completely from renewable resources by 2050.**

6. Energy performance

The enforcement of the RT 2012 thermal regulation for new buildings, the optimised selection of programmes and operations and the introduction of energy renovation passports are major challenges for improving energy performance.

What advantages does gas offer in terms of energy efficiency and sufficiency?

- Gas is a primary energy source that does not need to be refined before it can be used.
- With gas, it is possible to achieve high levels of energy performance in construction and in industry. Furthermore, gas is competitively priced and environment friendly.

What effect has the RT 2012 regulation had?

- RT 2012 has improved energy performance by promoting the construction of low energy consumption buildings, which requires the use - as standard - of energy-efficient equipment and/or equipment powered by renewable sources.
- **RT 2012 has led to a more balanced energy mix.**

What is the main strategy for existing buildings?

- Substantial and efficient investment will be required to meet ambitious objectives. Such investment will be possible provided that:
 - thermal renovation projects are optimised on an individual basis and insulation work is coordinated more effectively with measures to improve heating systems;
 - incentive mechanisms are improved and completed.
- Performance targets must be set and defined in terms of primary energy consumption (in line with RT 2012).

How can energy efficiency certificates (EECs) be made more effective and efficient?

- The EEC scheme has shown its limits in past periods and it is clear that simply improving it will not enable expected targets to be achieved.
- The scheme has now entered its third period and certain changes are being made. Updated “standardised action worksheets” relating to the replacement of equipment must continue to include a reference to the building stock, showing how energy performance has improved across the building stock since 2006. Replacing this with a reference to the market would, paradoxically, slow the pace of modernisation.
- The energy renovation passport scheme was created with a view to carrying out energy audits of residential buildings, proposing possible solutions and financing work (insulation, equipment). The goal is to renovate 500,000 homes per year.

Requirements in terms of legislation

- **Enact into law a primary energy performance improvement target for existing buildings, in line with RT 2012.**
- **Stipulate by law that the energy renovation passport scheme is eligible for energy efficiency certification.**

7. Gas, a least cost option for the energy transition

Gas is a competitive option for a community seeking to implement an energy transition. In such circumstances, the community can benefit from investments already made in an efficient infrastructure and organisational structure. This competitiveness benefits the consumer directly: for the past ten years, gas has been the least costly conventional energy source for individual consumers.

Could gas provide a means of pushing through a real energy transition at the lowest possible cost?

- **Yes, because the logistical structure of the gas industry can be adapted to meet new energy objectives in France - such as the construction of low-consumption buildings across the country - without the need for major investment.**
- **Yes, because gas is still the most competitively-priced heating source in France.** The annual energy bill (including tax) for a home with a gas heating and hot water system is still almost 25 to 30% lower than that of homes heated by other energy sources.
- **Yes, because the cost of gas in France is below the European average.** In France, the cost of gas for a residential customer using gas central heating and 21,400 kWh/year stood at 67.3 euros/MWh (including tax) on 1 January 2014, which is below the European average.
- **Yes, because gas is a carbon-reducing option that costs considerably less than renewable energy.** According to experts from IHS CERA, converting all coal- and oil-fired power plants to gas would cut emissions by 58% compared to 1990 levels.
- **Yes, because gas infrastructure could be adapted for biogas** for a very moderate cost. GrDF believes that connecting biogas manufacturers to the grid in order to meet the desired target of 20 TWh injected into the grid by 2020 would generate only a moderate increase in annual investments.

Could gas be the answer to implementing a real energy transition?

- **Yes, because gas is playing an increasing role in the energy transition** - as organisations such as Ademe, négaWatt and Ancre (national alliance for energy research coordination) have all pointed out - thanks to the development of biogas, the use of gas in the transport sector and the complementary nature of electricity and gas.
- **Yes, because gas offers significant environmental advantages.** Using gas is not only the most cost-effective way of reducing CO₂, but it also substantially reduces pollution and particle emissions.
- **Yes, because gas is very popular with French households.** For example, in a survey of 10,000 households conducted by Ademe in 2013, the majority of respondents said that natural gas is the best source of energy for heating.

Requirements in terms of legislation

- **Enact into law the principle whereby every energy sector must bear its own costs.**
- **Existing gas infrastructure, in which considerable investment has already been made, must be promoted as a viable choice at national and local level by emphasising the advantages it offers (availability, adaptability and the possibility of integrating renewable energy sources).**

8. Fuel gas, an option for transport

Gas must play a key role in developing sustainable mobility for the benefit of individuals, sea transport, freight transport and vehicle fleets (buses and corporate vehicles).

Is natural gas for vehicles a viable source of energy for the future?

- **Yes, because NGV is a technically tried and tested, cost-effective option that provides huge benefits for the urban environment.** For more than 25 years, large numbers of buses, refuse collection vehicles and light municipal vehicles have been running on NGV.
- **Yes, French cities are living proof of this:** 40% of cities with over 200,000 inhabitants use NGV-powered vehicles.

Is liquefied petroleum gas a viable source of energy for the future?

- **Yes,** because LPG is extracted from natural gas. Substantial reserves remain.
- **Yes, because LPG is a technically tried and tested, cost-effective option that provides huge benefits for the environment.**
- **LPG is used in a broad range of vehicles:** manufacturers have an excellent command of the technology and a large proportion of their vehicles can be fitted with LPG (depending on the country).
- **LPG is now available** in 1,750 filling stations.

Is liquefied natural gas a viable source of energy for the future?

- **Yes, because it is a clean fuel:** not only does it help reduce CO₂ emissions, but it does not emit either particles or SO_x and it considerably reduces NO_x pollution.
- **Yes, because it is particularly well suited to sea and river transport and to heavy vehicles, bearing in mind current and future regulations on air quality,** especially in Sulphur Emission Control Areas.

Does fuel gas have a future in France and in Europe?

- **Yes, in France.** The Parliamentary Office for the Evaluation of Scientific and Technological Choices (OPESCT) has drawn up a report on green vehicles which acknowledges the benefits of LPG and NGV. It encourages their use and development by granting owners of LPG- and NGV-powered vehicles the same advantages as electric vehicle owners. The ultimate goal is to promote a broad energy mix in transportation.
- **Yes, in Europe.** The draft Directive on the Deployment of Alternative Fuels Infrastructure provides for the development of a network of compressed natural gas (CNG) and liquefied natural gas (LNG) refuelling points. The LPG network is considered adequate, with 28,000 refuelling points (NGV is widely used in countries like Germany, Italy and Sweden).

Requirements in terms of legislation

- **Enact into law a broad range of alternative solutions.**
- **Enact into law the recommendations set out in the OPESCT report.**
- **Enact into law the development of NGV infrastructure and vehicle fleets.**
- **Make plans to nominate an interministerial coordinator for the development of NGV use.**
- **Establish a stable regulatory framework and tax incentives to encourage the use of gas as a fuel.**

9. Gas and security of supply: an abundant, accessible and storable energy source

Security of supply is a fundamental objective of all energy policies. Storage facilities are important because, as they are located as close as possible to consumption areas, they provide an efficient and immediate response to climate and geopolitical threats.

Is France's gas supply secure?

- **France has one of the broadest ranges of suppliers in Europe:** Norway (34%), the Netherlands (16%), Russia (15%), Algeria (14%), etc.
- **Its supply infrastructure is extensive and diverse.** Overground pipelines link France to northern Europe, central Europe and Spain. Marine pipelines link it to Norway and Great Britain. A network of well-distributed methane terminals supplies France with LNG from a variety of sources.
- **Global gas reserves are abundant and well distributed.** Taking unconventional gases into consideration increases the volume of reserves (two hundred years) and improves their geographic distribution.
- **LPG is available all over France,** even in isolated areas where other forms of energy are unavailable or less practical. There are many storage facilities across the country, which guarantee a continuous supply under all circumstances.
- **LNG is distributed via terminals and is now available everywhere for “small-scale” uses** (fuel for sea and road transport, sites located a long way from the grid).
- **The overall underground storage capacity for natural gas** is equivalent to 30% of French consumption.

What are the advantages of storage?

- The underground storage of gas plays a key role in ensuring energy **supply security**:
 - in the event of a cold snap, gas stored underground can be used immediately to satisfy needs;
 - during longer periods of cold weather, it meets the majority of additional requirements;
 - storage is the best way to ensure an immediate supply of gas when extreme weather conditions hit the whole of Europe, and geopolitical and operational contingencies are unlikely to occur;
 - should there be a supply crisis, France has stored around 140 TWh of gas, which is equivalent to the total annual volume of imports from Russia and Algeria.
- Storage facilities also play an important **technical and economic** role:
 - they meet 30 to 40% of French consumption needs in winter (seasonal peak in demand due to domestic heating requirements);
 - they are also used to store surplus supplies of imported gas in summer; in the future, they will be used to store locally produced biogas.

Requirements in terms of legislation

- **Set up a parliamentary committee to provide information on energy supply security in France.**

10. Environmental impacts: air quality and greenhouse gases

Improving air quality, especially in urban areas, is a major health challenge. Concrete measures must be taken at political level, in support of those being taken by industry.

How can gas help to improve air quality and reduce greenhouse gases?

- **By its composition.**
 - **Gas is a very pure fuel.** It contains virtually no sulphur compounds and, because of its gaseous state, the combustion process is easy to control and gives off very little SO₂, NO_x and CO. In addition, gas emissions contain only very low levels of other pollutants, such as particles.
 - **Natural gas emits very small amounts of greenhouse gases compared with other hydrocarbons.** Life cycle assessments (including methane leaks and various usages throughout the chain) have shown that it is still much better than the other fossil fuels in this respect.
- **There is evidence of this in several sectors:**
 - **In industry** [which accounted for 85% of SO₂ emissions in 2011, according to the *Centre Interprofessionnel Technique d'Etudes de la Pollution Atmosphérique* (Interprofessional Technical Centre for Studies on Air Pollution)]: Converting industrial processes to gas results in a significant drop in atmospheric pollution. The same applies to the tertiary residential sector. With regard to wood, energy policy must choose between using a renewable material that usually emits little CO₂ and limiting local pollution. A varied energy mix reconciles these factors.
 - **In transport:**
 - ✓ using gas reduces CO₂ emissions by around 10 to 20% compared with conventional fuels. Where biogas fuel is used, emissions are reduced by up to 80%;
 - ✓ gas significantly reduces air pollution, especially in urban areas: no particle emissions, a 70 to 90% reduction in NO_x emissions compared with conventional fuels, virtually no SO₂ emissions, no pollution by benzene or other formaldehydes.

What other advantages does gas have in terms of environmental impacts?

- Gas lines have a positive effect on biodiversity (eco-corridors).
- They have very little effect on the countryside.

Requirements in terms of legislation

- **Introduce legislation on air quality, covering four aspects.**
 1. **Policy:** include air quality improvement in the main objectives of the energy transition.
 2. **Standards:** establish emission reduction objectives in line with current European targets.
 3. **Regions:** put more emphasis on pollution control in local energy plans (for example, include air quality improvement indicators in PCETs).
 4. **Industry:** introduce measures in favour of virtuous industries such as the NGV/bioNGV industry (deployment objectives, reinforcement of the law on air and rational energy use, tax incentives designed to reduce air pollution, etc.).

11. Climate change adaptation

Climate change adaptation is a major issue, but gas is in a very strong position. The vulnerability of energy infrastructure to weather hazards varies greatly depending on the type of energy.

Why are the flexibility and resilience of gas infrastructure important assets in an energy transition context?

- Gas infrastructure is extremely resilient to the consequences of climate change because it is not affected by weather hazards: gas lines and infrastructure are buried underground, gas is stored in pipelines and other storage facilities so that supply can be maintained during peak demand periods and there are a large number of supply sources.

Why is it important to consider the flexibility and resilience of gas infrastructure when making energy choices?

- **Because gradually reducing electricity consumption** by increasing the use of gas technology minimises the risk of a breakdown in the balance between supply and demand.
- **Because the use of gas allows for a more diverse energy mix in the transport sector**, thanks to the development of LPG, NGV [either in compressed form (CNG) or liquid form (LNG)] and bioNGV. The fact that it is distributed via underground pipelines means that it is less sensitive to weather hazards.
- **Because gas supports virtuous technologies:**
 1. decentralised generation systems, the output of which is concomitant with the needs of the power system (micro-cogeneration boilers);
 2. dual energy solutions that allow for switching between energies depending on the status of the infrastructure (hybrid heat pumps).
- **Because some biomass industries are affected by weather hazards, such as those that require significant amounts of water** (liquid biofuels for instance):
 1. the production of biogas from waste requires very little water compared with other agrofuel production processes;
 2. gas biofuels can be produced from crops that require much less water than those used for liquid biofuels, be they first or second generation.

Requirements in terms of legislation

- **Promote strategies that rely on the resilience of gas infrastructure.**
 1. The development of complementarity between gas and electricity, for example the gradual reduction of electricity consumption through the increasing use of gas technology. In particular, establish a development framework that allows for decentralised production based on micro- and mini-cogeneration (revision of 2001 tariffs, support for the renewable heat production fund, etc.).
 2. The diversification of energy use in the transport sector, through the development of LPG, NGV (CNG and LNG) and bioNGV.

12. Infrastructure management

Gas infrastructure must be managed at an appropriate level to ensure that the grid operates as efficiently as possible.

What sort of regulatory framework is needed for gas infrastructure?

- **More responsibility is being shifted to regional authorities and to public inter-municipal cooperation bodies.** The strong political support for local initiatives has been accompanied by a greater focus on efficient energy infrastructure management. Local authorities are in an excellent position to implement certain aspects of energy policy, and they have a legitimate role to play in regional planning and in the fight against fuel poverty.
- **However, national regulations are still needed** to reduce the inherent inequality between regions and to ensure both human safety and supply security.

Are national regulations incompatible with the development of local energy policies?

- On the contrary, the involvement of national organisations in the development of LPG and LNG in areas where biogas is not available ensures that relevant advice and top-notch services are available nationwide (group purchasing, the same quality of service all over France, etc.).

In what other ways can infrastructure management be improved?

- **First and foremost by making sure that existing gas infrastructure is not excluded from energy plans and urban development schemes.** Energy plans (SRCAEs and PCETs) and urban development programmes [SCoTs (territorial cohesion schemes) and PLUs (local urban development plans)] are becoming increasingly prescriptive, thus enabling regions to develop their energy transition strategy. Gas infrastructure and the possibilities it offers are often largely neglected in these plans and programmes when, in actual fact, they constitute an accessible and effective asset for local communities.

Requirements in terms of legislation

- Reinforce the national regulations governing gas infrastructure, while stepping up cooperation with local authorities (regional investment conference, consumption data, etc.).
- Make sure that greater account is taken of gas infrastructure in energy plans (energy performance plans, SRCAEs, PCETs) and in urban development programmes (SCoTs and PLUs), notably by consulting with infrastructure operators beforehand.

13. The simplification of procedures

The delays caused by the excessive number of procedures involved in developing a gas project are a major hindrance. The complexity of these procedures can get projects like this into trouble. So the risk is high for project owners and investors alike.

What are the issues involved in simplifying procedures for the gas industry?

- Simplifying some procedures would facilitate the development of promising new energy sources like biogas and NGV (CNG and LNG), which is currently hindered by long investigation and development phases.
- Therefore a single permit is being trialled for methanisation projects; it replaces all the authorisations needed for ICPEs (facilities classified for environmental protection), as well as the building permit. However, it is being trialled in just a handful of regions for three years only.
- NGV (CNG and LNG) filling stations and satellite stations (for bunkering, industry and the distribution of energy to locations far from the grid) are subject to ICPE regulations, along with registration or authorisation procedures depending on the size of the station. An intermediate registration system could be set up (a new category of ICPE classification allowing for simplified investigation procedures for standard facilities); this system could be modelled on that applicable to petrol and diesel filling stations.
- There are several procedures applicable to natural gas pipelines (declaration of public utility, backfitting of urban development documents, water legislation, land clearing permit, archaeology, building permit, endangered species waiver) which prolong investigation times and increase the risk of objection. The situation is made worse by compensatory environmental measures imposed in relation to land other than easements of access, even though the pipelines do not have any residual impact (being buried) and they promote bio-development along easements of access (eco-corridors in the green open system).

Requirements in terms of legislation

- **Introduce a permanent single permit system for all methanisation facilities.**
- **Simplify ICPE procedures for fuel gas filling stations (NGV/CG/LNG) and satellite stations by setting up an intermediate registration system modelled on petrol and diesel filling station registration procedures. The registration process should not take more than five months in all.**
- **Harmonise building and operating permit application procedures, shorten investigation times for natural gas pipelines and control compensatory environmental measures imposed in relation to land other than easements of access.**

