La Fabrique Ecologique

FONDATION PLURALISTE DE L'ÉCOLOGIE

# 100% renewable gas – How to drive change now?

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SYNTHESIS

France has set itself the ambitious target of dividing its greenhouse effect gas emissions by four (and has recently announced its renewed determination to aim for carbon neutrality by 2050). With this objective in mind, the Energy Transition Law of 2015 foresees the development of renewable energies to meet a third of all energy demand by 2030, with 10 % of total consumption to be provided by renewable gas by the same date.


However, renewable energies are usually associated with the solar and wind power sectors. Renewable gases are often overlooked, despite their multiple uses (for heating, electricity production, transport, etc.) and their back-up role as an additional means of storing energy within the context of the electricity supply system.

Yet these gases have many advantages for the energy transition, being perfectly compatible with the idea of a circular economy, as they transform waste into a source of energy while contributing to local economic development. According to the French Environment and Energy Management Agency (ADEME) every megawatt-hour (MWh) of biomethane produced, injected and consumed leads to a saving of 0.2 tonnes of $CO_2$ compared with conventional natural gas, and the use of a 100 %-renewable gas blend could prevent direct emissions of 63 million tonnes of $CO_2$ per year by 2050.

Such a scenario was still a distant prospect in early 2018, and while the process has now been set in motion, much will need to be done in order to have any hope of attaining the 10 % target set forth for 2030 under the Energy Transition Law. This note discusses why progress has been so slow in developing renewable gas supply chains, highlights their usefulness within the energy transition context, and proposes solutions to encourage the current government to further develop their use.

We are presenting two proposals to boost the expansion of these supply chains and to foster the large-scale creation of future projects:

1) **The number of facilities producing renewable gases from agricultural resources should be tripled by the early 2020s**. We therefore propose that the current financial and regulatory requirements be made more flexible, and the involvement of the national committee for biogas production be increased. In return for providing a significant boost to this supply chain, it must be made more easily accessible to farmers.
2) **A new roadmap should be defined for Power-to-Gas technology**, so as to allow for medium-term energy storage and contribute to the long-term harnessing of variable energy sources such as wind and solar power. To achieve this it will be particularly important to simplify current legislation on the production and storage of hydrogen and to encourage experimental initiatives throughout the country.