

**From:** [REDACTED]  
**Sent:** mercredi 12 février 2020 16:29  
**To:** [REDACTED]  
**Subject:** Sector integration (role of gas) + invitation (site visit)  
**Attachments:** Fuels of the Future\_M8\_21012020\_GRDF .pdf

Dear [REDACTED]

I would like to thank you again for the meeting on January, 29 with our association Gas Distributors for Sustainability (GD4S).

As I remember that you mentioned the role of gas in the decarbonization wasn't very clear to you, I wanted to share with you elements about France, as a case study.

Furthermore, GRDF has a stand at the *Salon International de l'Agriculture* in Paris between the 24th and the 28th of February ([www.salon-agriculture.com](http://www.salon-agriculture.com)).

We will present the synergies between agriculture and energy as well as our partnerships with farmer unions, public agronomy institute and NGOs.

We propose an exclusive visit of a biomethane plant close to Paris during the event on February 27 morning. It would be for us a pleasure to welcome you there.

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For France, the trajectory of renewable gas could be summarized like this:

1. **Potential for 100% renewable gas in 2050** is assessed by ADEME (independent public body for energy management and efficiency) [www.ademe.fr/a-100-renewable-gas-mix-in-2050](http://www.ademe.fr/a-100-renewable-gas-mix-in-2050)
2. **Biomethane** is today a reality and a quick win:
  - a. The **development** is very fast in our grid (please see the slide 3 in the attachment "Fuels of the Future"). The French law foresees 10% of renewable gas in 2030, while the sector asks for 30% according to the significant current pipeline of projects (>20 TWh)
  - b. The biomethane production generates significant **positive externalities and impacts**, as described in the report of the French NRA "Le Verdissement du Gaz" (page 28, Rapport du Comité de Prospective de la CRE [www.eclairerlavenir.fr/wp-content/uploads/2019/07/Rapport-GT1-BD-INTERACTIF.pdf](http://www.eclairerlavenir.fr/wp-content/uploads/2019/07/Rapport-GT1-BD-INTERACTIF.pdf) (sorry only in French))
  - c. Biomethane production could be **sustainable** as concluded by WWF France (study finalized soon and available in English in March) [www.wwf.fr/qui-sommes-nous/entreprises-partenaires/grdf](http://www.wwf.fr/qui-sommes-nous/entreprises-partenaires/grdf)
  - d. Biomethane can be injected in the grid as soon as it respects the technical specification (same as for natural gas). Therefore, we do not have any technical big issues (or investment requirements) to receive biomethane in the grid.
3. **Hydrogen** is a medium/long term development that requires actions now.  
 All infrastructure operators in France have published last year a report about technical and economic conditions for injecting hydrogen into gas grid.  
 It present a structured approach of what is known, implemented or under assessment with a list of 10 priority levers. [www.grtgaz.com/fileadmin/plaquettes/en/2019/Technical-economic-conditions-for-injecting-hydrogen-into-natural-gas-networks-report2019.pdf](http://www.grtgaz.com/fileadmin/plaquettes/en/2019/Technical-economic-conditions-for-injecting-hydrogen-into-natural-gas-networks-report2019.pdf)
4. **Gas mobility** is also increasing with analysis showing its sustainability in terms of life cycle analysis (please see the presentation "Fuels of the Future" in attachment with especially the study of IFPEN mentioned in slide 6 available here [www.afgnv.org/wp-content/uploads/2019/10/IFPEN\\_LCA\\_bioCNG.pdf](http://www.afgnv.org/wp-content/uploads/2019/10/IFPEN_LCA_bioCNG.pdf))

5. For the **heating sector**, gas offers efficient and affordable solutions and especially possibility of “hybridation”. Hybrid heat pumps are part of the sector coupling at a “downstream” or user level compared to P2G.

Looking at other countries from GD4S’ members, GNI has worked on very interesting approaches too, 2050 Vision for Ireland: [www.gasnetworks.ie/vision-2050](http://www.gasnetworks.ie/vision-2050)

Therefore, in terms of sector integration, renewable gas implies Agriculture, Transport and Electricity.

Best regards,



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