How to power a clean energy future

February 27, 2017. **Organics may offer most growth potential for creating renewable energy from waste** by Cole Rosengren, WasteDIVE. “The waste industry has been creating various forms of energy from waste for decades, however output levels are still smaller than renewable sources such as wind or solar. While growth in the thermal conversion sector may be limited in the coming years, interest in new projects to create energy from landfill gas or anaerobic digestion is high. Spurred by federal incentives for transportation fuel and new state policy regulations, organic material may hold the key to making waste a bigger part of the country’s clean energy transformation (...) Methane’s role in climate change was a major focus of the Obama administration’s Environmental Protection Agency (EPA) and will continue to be regulated by new performance standards put in place. The growing recognition of methane's effects has led to more interest among municipalities and companies in diverting organics from landfills. Yet even if landfills didn’t receive a single scrap of food starting tomorrow, **there would still be gas to capture from existing material for decades to come** (...) Based on the latest EPA's Landfill Methane Outreach Program (LMOP) data, 652 landfills are already capturing biogas to create some form of energy, 35 more have planned facilities and nine are under construction. On top of that, an additional 416 sites are considered candidates for biogas capture. When it comes to potential growth, the interest among companies and municipalities in new biogas capture gas systems that can create energy is already high. The factors around anaerobic digestion can be more complicated. According to the American Biogas Council, 39 standalone digesters are currently processing food scraps in the U.S. with more than 1,500 other digesters at water resource recovery facilities or farms that could potentially co-digest food scraps. "Historically, digesters have been only manure or only wastewater and now almost every digester mixes a bunch of feedstocks because every digester is a reflection of organic waste material that’s available locally," said Patrick Serfass, executive director of the American Biogas Council. **Co-digestion is already happening at facilities around the country** and is seen as the key to enabling food scrap diversion programs in multiple cities. As for standalone facilities, estimates vary but at least 20 projects are currently in the pipeline, including major operations in California and New York. Though as is the case with other technologies, this growth is still behind what has been happening in other countries. **“We’re at an early stage of commercialization in terms of actually applying it in the U.S.,”** said Serfass (...) "There’s political will, the technical ability exists, but the financial engineering is where they break down," said Johannes Escudero, CEO and executive director of the Coalition for Renewable Natural Gas. **“The cost of technology has to come down. Our industry has to figure out a way to reduce the cost.”**

February 27, 2017. **Il biogas piace all’Italia. Il settore vale 2,4 miliardi di metri cubi l’anno: è la quarta produttrice al mondo.** “La filiera italiana del biogas e del biometano in agricoltura è sempre più un caso di scuola internazionale: da un punto di vista qualitativo, il modello e disciplinare di produzione promosso dal Cib, denominato 'Biogasdoneright', sembra avere pochi eguali al mondo". Secondo i risultati di uno studio di Ecofys (società internazionale di consulenza energetica e climatica) "**dal modello italiano si ottengono più cibo e più energia**". Questo perché si basa "sull'uso prevalente di sottoprodotti e sui doppio raccolti, in modo da non essere in competizione con le produzioni alimentari" (...) In particolare, rileva lo studio, "il modello italiano si basa sul criterio delle doppie colture: una coltura invernale denominata 'di copertura' viene
aggiunta a quella convenzionale del periodo estivo, senza necessità di irrigazione o fertilizzazione aggiuntiva, grazie alle condizioni di umidità favorevoli. Intorno a questo modello c'è anche un interesse internazionale, tanto che - viene detto - "cinque docenti di fama internazionale hanno deciso di costituire un team internazionale per valutare la scalabilità del modello italiano."

February 27, 2017. Biogas, il futuro è 'Carbon negative' di Alessandro Vespa, AgroNotizie. “Sostenibilità, biodiversità, incremento della fertilità dei suoli e risoluzione al problema dei reflui zootecnici. Sono questi gli aspetti principali del nuovo modello italiano per la produzione di biogas presentato alla terza edizione di Biogas Italy del Cib. Il nuovo modello italiano per la produzione di biogas è 'Carbon negative', assolutamente sostenibile dal punto di vista ambientale, risolve il problema dei reflui zootecnici, favorisce la biodiversità e incrementa la fertilità dei suoli consentendo un risparmio nell'uso di fertilizzanti di sintesi e incrementando la produttività.”

February 26, 2017. Méthanisation: la durée des contrats d'achat d'électricité portée de 15 à 20 ans par AFP. “La durée des contrats d'achat d'électricité produite via la méthanisation, dont bénéficient les professionnels de la filière biogaz, est étendue de 15 ans à 20 ans, s'alignant ainsi sur celle des nouvelles installations, aux termes d'un arrêté (...) “Les textes sur l'autoconsommation sont publiés”, a ajouté Mme Royal: “tous ceux qui vont produire de l'énergie peuvent consommer cette énergie pour faire fonctionner leur exploitation et le surplus d'énergie, ils vont avoir le droit de le revendre sur le réseau”. “Aujourd'hui les méthaniseurs vont devenir encore plus rentables”, s'est réjouie Ségolène Royal. “Ca leur redonne du pouvoir d'achat (aux agriculteurs), et en même temps, ça permet de contribuer à l'accord de Paris sur le climat”, a souligné la ministre. En 2016 la production de biométhane, autorisée depuis cinq ans en France, a progressé de 162% en un an pour atteindre 215 gigawattheures (GWh), soit l'équivalent de la consommation de près de 18 000 logements ou 1 000 bus.”

fruit de la collaboration de GRDF, de GRTgaz, du Syndicat des Energies Renouvelables (SER), du SPEGNN et de TIGF. Fin 2016, les 26 sites injectant du biométhane dans l’ensemble des réseaux et les 241 projets en phase avancée recensés confirment la tendance observée en 2015. Néanmoins, la production de gaz renouvelable ne représente que 0,05 % de la consommation française alors que la Loi de Transition Énergétique pour la Croissance Verte (LTECV) fixe à 10 % la consommation de gaz renouvelable à l’horizon 2030. L’année 2016 a été marquée par la mise en œuvre d’une ordonnance donnant la possibilité de recourir aux appels d’offres, venant en complément des mécanismes de soutien actuels, afin d’atteindre les objectifs. Si l’ensemble des acteurs de la filière saluent cette avancée majeure, cette dernière ne peut se suffire à elle-même. Pour être au rendez-vous des ambitions fixées par la LTECV, plusieurs mesures structurantes sont nécessaires : l’adaptation du coefficient S pour les sites n’ayant jamais valorisé de biogaz en contrat d’achat, le prolongement du contrat d’achat de 15 à 20 ans à tarif identique et le passage d’un calcul mensuel des capacités d’injection à un calcul annuel. ”

February 22, 2017. Méthanisation. La hausse des tarifs d'achat fera-t-elle redécoller le biogaz ? par Cécile Julien, Terre-net Média. “La filière biogaz française espère que l'annonce de nouveaux tarifs de rachat de l'électricité donnera une bouffée d'oxygène pour les agriculteurs qui hésitaient à créer des unités de méthanisation. D'ici à 2030, d'après la loi de transition énergétique, 10 % de notre consommation de gaz et 40 % de notre électricité doivent provenir d'énergies renouvelables. Et c'est là tout l'intérêt de la méthanisation : le biogaz issu de fermentations anaérobies peut être injecté directement dans le réseau d’approvisionnement, comme brûlé en cogénération pour produire électricité et chaleur. Pour satisfaire ces ambitions, l’objectif est de 1 000 méthaniseurs en 2020. Pourtant, cette nouvelle filière a eu du mal à décoller. A fin 2016, il n’y avait que 270 unités en fonctionnement et seulement 24 en injection de gaz épuré dans le réseau. Bien peu, surtout si l’on se compare à nos voisins d’Outre-Rhin, où plus de 7 000 méthaniseurs sont en production.”

February 21, 2017. Italian farmers hail coming of biomethane production incentives by UPI. “A long-sought government decree promoting the production of biomethane will be a boon to agriculture, the Italian Farmers Confederation said this week. The farmers group made the prediction Wednesday during an agri-energy conference at the Italian Ministry of the Environment and Economic Development in Rome, where officials touted the benefits of the decree, which was issued in December after a wait of 2 1/2 years. "The decree to encourage biomethane opens new opportunities for Italian farms, giving them impetus to do energy chain-intensive work and allowing farmers to supplement their incomes, producing food and energy in a sustainable way," the farmers group -- known by its Italian acronym CIA -- said in an issued statement. (...) The duration of the incentives, regardless of the destination of biomethane product will be 20 years.”

February 14, 2017. Germany. An impressive success story: The Biogas Association turns 25. “From 140 to more than 9,000 biogas plants. Wide voluntary cooperation basis of success. Fachverband Biogas has established internationally recognized standards. Today exactly 25 years ago, on February 14, 1992, 17 biogas pioneers founded the Fachverband Biogas on a farm in the Swabian Forest. Convinced that biogas plants provide both excellent fertilizers and regenerative climate-friendly energy, they wanted to provide a structured platform with the founding of biogas utilization in Germany (...) The Biogas Biogas Association is responsible for the fact that the first attempts to ferment manure, residues and energy crops have resulted in a technology that is in demand all over the world. “Without the commitment and conviction of the pioneers, biogas today would certainly not play the important role in the generation of decentral, climate-friendly energy, as it does in fact,” emphasizes the president of the biogas association, Horst Seide (...) The Biogas Association has always played an important role in shaping the legal framework conditions in the Renewable Energy Sources Act (EEG) as well as in the further development of technical standards.”
La méthanisation en voie de créer des milliers d’emplois en France par Frédéric Douard, Bioenergie International. “Pour l’ADEME, la méthanisation est une filière prometteuse aux bénéfices multiples, tant en termes environnementaux (traitement des déchets, production d’énergie renouvelable, diminution des émissions de gaz à effet de serre…) que de diversification des activités agricoles, notamment pour les éleveurs. Elle doit prendre une part importante dans l’atteinte des objectifs fixés par la loi de transition énergétique pour la croissance verte. En France en janvier 2016, ce sont plus de 450 installations qui fonctionnent:
- 80 installations en industries (agroalimentaire, papeterie, chimie),
- 88 installations sur stations d’épuration des eaux usées urbaines,
- 16 installations liées au traitement de déchets ménagers (12 après un tri mécanique et 4 après collecte séparée des biodéchets)
– Et enfin, 236 installations à la ferme et 31 installations centralisées (installations de grande taille regroupant plusieurs agriculteurs ou mobilisant et traitant les déchets d’un large territoire)
De nombreux acteurs sont en place. Environ 430 entreprises proposent leur service en 2016 pour assurer la conception, le développement, la construction et l’exploitation des installations de méthanisation. En 2013, le Club Biogaz avait identifié 1700 emplois dans la filière biogaz. Cette même étude estimait à 15 000 le nombre d’emplois supplémentaires créés en 2020 (si l’objectif de développement de 1000 méthaniseurs à l’horizon 2020 était atteint). Le potentiel d’emplois est donc important.”

Honoured for his role in scaling up biogas by Jean Marc Sika, Hivos. “Since Xavier Bambara joined the National Biogas Programme, he has championed the use of biogas in the rural areas as an adaption mechanism to deforestation and climate change. Further to this his stewardship has seen the construction of 10,000 bio-digesters in Burkina Faso (...). The government has further committed to build 40,000 biogas plants by 2020 (...). Frontrunners like Xavier continuously demonstrate that scale up of clean energy to the masses is possible. Through Hivos East Africa’s Africa Biogas Partnership Programme, individuals like him have contributed to the construction of over 55,000 biogas plants in Kenya, Burkina Faso, Ethiopia, Uganda and Tanzania.”

China to spend $7.3 billion in Rural Methane Projects as Government seeks to increase the use of Clean energy. “According to a plan released by the country's top economic planner, during the 13th Five-Year Plan (2016-2020) period, China will build 172 new biogas projects and 3,150 large-scale methane projects. The plan aims to increase the country's methane producing capacity by 4.9 billion cubic meters, replace the equivalent of 3.49 million tonnes of standard coal with cleaner energy and cut carbon emissions by 17.62 million tonnes. The projects will benefit more than 230 million rural residents (...). According to official estimates, China generates 1.4 billion tonnes of rural waste materials annually that could be used for methane production. This amount of waste could produce 73.6 billion cubic meters of biogas and replace 87.6 million tonnes of standard coal.”

Isabelle Kocher: “Today gas is at the heart of the ongoing energy revolution”. “Interviewed by the French Gas Association, Isabelle Kocher, CEO of ENGIE, explains how natural gas plays a fundamental part in the Group’s development strategy. ENGIE brings 70 years of expertise to the many innovative projects it is carrying out in France and numerous other countries, particularly involving bio-methane and hydrogen (...). Q. Last September you declared: “It is no longer a crazy dream to imagine that someday the entire energy world will be decarbonized, natural gas included.” When do you expect this gas decarbonization to be achieved? What is your vision of tomorrow’s “decarbonized gas” (biomethane, synthesis gas produced via power-to-gas)? How important is this challenge for ENGIE and what is the group’s policy in that area? A. Green gas is a crucial factor for achieving the energy transition, in the same way as natural gas is its mainstay. Out of the various scenarios for dividing greenhouse gas emissions by a factor of four, the most ambitious one – as in the Ademe or Negawatt scenario – relies massively on
“decarbonized gas”. This means gas that doesn’t come from the subsoil but from methanation, which recycles carbon that is already in circulation. The potential for methanation in France represents about 40% of the country’s current natural gas consumption. Making gas “greener” is already underway, with more than twenty sites injecting biomethane into the GRDF and GRTgaz grids, without any need for changing current gas infrastructures. We are going from a logic of natural gas to one of a gas vector. Through its Energy Transition Act, France set itself a goal of 10% renewable gas by 2030. This step is important as it marks the determination of public authorities to develop the sector. ENGIE is the current leader on this market segment and certainly intends to hold onto its lead role, especially by developing key partnerships to grow the sector, and by putting its efforts into R&D on what is known as 2nd-, or even 3rd–generation biomethane. In particular, the group has built the Gaya research platform, which will enter service at the start of 2017. The tool constitutes a major step in the deployment of the sector for producing biomethane via gasification of dry and woody biomass – generally known as 2nd-generation biomethane – which has a large potential. We are also highly involved in green hydrogen, the other renewable gas that has a promising future (...) We are convinced about its strategic interest as it helps to speed up the transition to an energy world that emits less CO2, in both centralized and distributed ways. Through its capacity to be stored and transported, this green gas is an excellent growth factor for intermittent renewable gas sources and can facilitate the rollout of green mobility. No one can say exactly when these technologies will be economically viable but we are convinced of the importance of these developments for two reasons: the first is that the technologies meet real needs and are pivotal for making a new energy world possible; the second is that we are now in a world where technological progress is extremely fast.”

February 10, 2017. China’s citizens overwhelmingly want renewable energy by Energiewende Team. For several years now, China has been proving its critics wrong—coal use is peaking, and it has been agile in pursuing climate goals. The energy transition there is especially popular among residents of Chinese cities, Cynthia Shahan reports. “There are many places in China that are “worst-case scenarios” of the Industrial Age and its wastes. It is no wonder that many Chinese citizens are wide awake to solutions. A new survey (by Ipsos) shows that 96% of Chinese urbanites believe “green power” could help (...) Similar surveys carried out in the US and the UK in the last two years found that 50% and 48% of US and UK respondents were willing to pay a higher price for renewable energy respectively”

February 10, 2017. Biogastur culmina la construcción de la mayor planta de biogás agroindustrial por Javier Rico, Energías Renovables. “Estará construida en primavera y entrará en funcionamiento poco después. Son las últimas previsiones de la culminación de un proyecto que echó a andar en 2011 y que seis años después se convertirá, con 4,5 megavatios, en la planta de biogás agroindustrial de España con mayor potencia. Biogastur avanza los últimos detalles de una instalación con cogeneración que se ubicará en Navia (Asturias) y que parte de un acuerdo con Central Lechera Asturiana. Gracias a este, se tratarán anualmente 400.000 toneladas de residuos ganaderos, que se convertirán en biogás y en fertilizantes sólidos y líquidos.”

February 9, 2017. How Germany’s energy transition extends beyond its borders by Catherine Cheney, devex. “The Energiewende, German for energy turn, is the name of an ambitious effort by Germany to transform its energy sector and transition to a low- or no-carbon economy. The country aims to bring down greenhouse gas emissions by 40 percent by 2020, and up to 95 percent by 2050, as compared to rates in 1990. By phasing out nuclear power and fossil fuels and developing renewable energy sources, Germany is undergoing its largest transformation since the reconstruction effort following World War II. While Germany is often a reluctant leader globally, it is also a pioneer in this sector and is hoping to use the Berlin conference to move “towards a global Energiewende (...)”
first took off in 2000, **Germans have taken energy production into their own hands.** For example, energy cooperatives that allow communities to sell electricity to the national grid are involving citizens in the energy transition, and serving as a model for others. “What makes Germany’s transition so incredibly powerful is that people have skin in the game,” said Justin Guay, program officer for climate at the David and Lucile Packard Foundation (...) **With concerns about the faltering future leadership of the U.S. on climate action, all eyes are on Germany, but China may be more likely to emerge as the de facto leader on climate change, motivated at least in part by the promise of a return on investment.”

February 9, 2017. **China Moves To Implement More Sustainable Ag Practices, Which is Good For Everybody** by Andrew Amelinckx, Modern Farmer. “In a move that could have global implications, China, which has the largest farming sector in the world, has signaled it will be shifting its focus toward more sustainable agricultural methods, which includes **practices like promoting organic production, building biogas digesters and reducing water usage.** On Sunday, the Central Government released its Number One Central Document, the first policy statement of the year, and as in the previous 13 years, it focused on agriculture and rural development. While previous Number One Documents have included mentions of sustainability measures, this year’s had a particularly strong focus on developing “green” policies.”

February 8, 2016. **UK: ADBA calls for new biogas policy as end of Feed-in Tariff nears.** “With the government today announcing its decision to continue limiting anaerobic digestion deployment in the Feed-in Tariff, the Anaerobic Digestion and Bioresources Association (ADBA) is calling on the government to put forward a new policy on support for AD on farms and using wastes. Commenting on the announcement, ADBA Chief Executive Charlotte Morton said: “While today’s announcement improves the FIT in some areas, it does little to address the **lack of ambition the government has for anaerobic digestion as a mechanism to decarbonise farming and waste.** Without anaerobic digestion on farms and of wastes, the government cannot decarbonise those key sectors so will miss its targets. The Feed-in Tariff is now likely to be closed to new applications sometime next year. The Committee on Climate Change has highlighted the policy gap between what government is announcing and what is needed to meet the next carbon budget. So new support for AD needs to be developed as soon as possible so that it is in place by the time the FIT is closed.”

February 7, 2017. **Citizen power: Arne Jungjohann talks Energy Democracy** by Christian Roselund, PV Magazine. “In December Energy Democracy, a book telling the story of Germany’s Energiewende from the perspective of citizen ownership of renewable energy, hit the shelves. The book is the latest collaboration of Political Scientist Arne Jungjohann and Writer and Translator Craig Morris, who worked together on the German Energy Transition website (energytransition.de). pv magazine caught up with Jungjohann to talk about the book, and why citizen involvement in energy is important (...) **What makes Germany’s story so unique is that it is citizens that are driving the Energiewende.** It may be the only country in the world where this transition is being primarily **driven not by corporate power, but by ordinary people (...)** I see that the global transition is in full swing, despite some possible policy steps backward. But given the economics the transition to renewables is unstoppable. At this point two questions emerge that require a political answer: first, can we ramp up renewables and close down coal fast enough to keep the impacts of climate change to an acceptable level? And second, will large corporations dominate this new energy world, or will citizens and communities have a say in it?”

February 3, 2017. **City of Phoenix and Ameresco wastewater treatment plant biogas project** by Francesca Brindle, Hydrocarbon Engineering. “Ameresco, Inc., a leading renewable energy and energy efficiency company, and the City of Phoenix have hosted a ceremonial groundbreaking event for the start of a multi-million dollar wastewater treatment biogas utilisation project at the 91st Ave wastewater treatment plant (WWTP). **Once operational, it is expected to be the largest wastewater treatment biogas-to-renewable natural gas facility of its kind in the US. ”**
February 1, 2017. **Assessment of sequential cropping. For low ILUC risk biomethane production** by Ecofys. “In Europe, agricultural land is usually fallow during winter time. In a sequential cropping scheme, a winter cover crop is cultivated in addition to the usual summer crop. For the Italian Biogas Consortium (CIB), Ecofys assessed the impacts of this practice and found that *agricultural crop yields can increase dramatically without negative environmental impacts if sequential cropping is introduced*. The assessment addressed how much additional biomass is produced and to what extent positive or negative impacts occur on soil nutrients, soil erosion, water availability, on-farm biodiversity and the carbon balance. The team furthermore investigated whether sequential cropping has a positive business case and whether it could be scaled up in other regions. The focus was set on the combination of maize silage as a summer crop (for animal feed) and triticale silage as an additional winter crop (for biogas) in the Po-valley in northern Italy. Our results show that this agricultural system is promising in all respects: *increasing crop yields for animal feed and additional biogas feedstock without displacing existing feed production or other negative environmental impacts, while providing additional income to farmers*. A growing number of Italian dairy farmers start to adopt the practice, which they coined ‘Biogasdoneright’. It allows them to contribute positively to the energy transition in an agricultural sustainable way.”

February 1, 2017. **Biogas – easy to underestimate** by Monica Westman Svenselius, Linköping University. “Biogas has far more benefits to society than simply being a non-fossil fuel, and its use contributes to all of the UN’s sustainable development goals. These conclusions have recently been presented in a report by Linda Hagman and Mats Eklund of the Biogas Research Center (...) The report: "The Role of Biogas Solutions in the Circular and Bio-based Economy”

February 1, 2017. **Renewable Energy Progress Report** from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. “Renewable Energy is at the core of the Energy Union’s priorities (...) For what concerns biogas, its use has grown faster than expected, especially in Germany and Italy (...) The deployment of biogas and bioliquids combined, both at negligible levels in 2004, reached 7% of renewable electricity in 2015 (...) Renewable waste deployment amounted to 3.4 Mtoe in 2015. Biogas in 2015 surpassed the projected values with 3.2 Mtoe (...) Biogas do not play a prominent role in the transport sector at EU-28 level, but are deployed in some Member States (e.g. Sweden& Finland).”

January 31, 2017. **El Govern aprova les bases per al Pacte Nacional per a la Transició Energètica amb l’objectiu d’arribar al 100% d’energies renovables el 2050**. “Les prioritats són situar el ciutadà en el centre del model energètic, garantir la seguretat en el subministrament i esdevenir un instrument essencial en la lluita contra la contaminació ambiental. El document ja ha estat debatut amb els agents socials i amb el sector energètic, i ara entrarà al Parlament per a la seva presentació i negociació amb els grups politics.”

context:

February 8, 2017. **New report on climate change in Catalonia lays the foundations for bold new policies** by Ilario D'Amato, The Climate Group. “Catalonia could face catastrophic effects of climate change in the next few years, but it is ready to strengthen its strategic policies to mitigate such consequences,” a new report [Third Report about the Climatic Change in Catalonia] states. “Catalonia is proudly the European co-chair of The Climate Group’s States & Regions Alliance,” underlines Libby Ferguson, States & Regions Director, The Climate Group, “and is also a founding signatory of the Under2 Coalition, committed to reach net-zero emissions by mid-century.” “Through its bold policies, the Catalan government is showing how the challenge of climate change can be transformed into an opportunity of a healthier, more sustainable society and a prosperous economy.”
Decarbonising transport using biomethane

February 27, 2017. El autobús que se mueve con fango por Javier A. Fernández, El País. “Miles de autobuses propulsados por biometano, un biogás refinado, circulan por las principales ciudades europeas. El primer autobús de España con esta tecnología recorre Pamplona desde finales de 2016 (...) El autobús pamplonica, fabricado por Mercedes y operado por TCC, "es capaz de recorrer 1.000 kilómetros alimentado con los residuos que todos sus pasajeros generarían en un año", afirma Miquel Torrente, director de energía del Grupo Hera. Esta compañía catalana, especializada en la transformación de desechos, lleva a cabo el proyecto junto a Gas Natural Fenosa, la Mancomunidad de la Comarca de Pamplona, TCC (que opera el transporte público de Pamplona), FCC (la encargada de la recogida de residuos urbanos), y SODENA (la empresa pública de desarrollo de Navarra). Tras una prueba piloto de aprendizaje para generar biometano con residuos procedentes del vertedero de Góngora (Navarra), Gas Natural Fenosa y el Grupo Hera, junto con la Mancomunidad de la Comarca de Pamplona, decidieron probar con los fangos de la depuradora de Arazuri. Con ellos han producido un biometano con la calidad adecuada para propulsar vehículos pesados (...) Gas Natural Fenosa participa en proyectos para optimizar la calidad de este gas biológico en bruto, a través de un proceso conocido como enriquecimiento. Dura “tan solo unos minutos”, detalla María Piedad Martínez, responsable de proyectos de biogás de Gas Natural Fenosa, y consiste en eliminar las impurezas como los siloxanos o el ácido sulfhídrico y separar posteriormente el CO2 del metano. Una vez depurado, el biogás pasa a llamarse biometano y sirve de combustible vehicular, como en Pamplona, y para el uso doméstico una vez es inyectado en la red de gas natural, como la planta de Valdemingómez hace actualmente en Madrid. Tras el éxito del proyecto en Navarra, Gas Natural Fenosa, junto con otros socios, investiga nuevas técnicas de depuración del biogás para obtener biometano.”

L'Italia - ha detto Giovanni Perrella, del ministero dello Sviluppo Economico - è stata uno dei primi paesi in Europa a credere nei biocarburanti avanzati, quelli non in competizione con il food, come dimostra la posizione assunta nel corso della definizione della direttiva Iluc. **Il nuovo decreto in preparazione prevede un sostegno ai biocarburanti avanzati che pone il biometano in prima linea.** Il decreto prevede un tetto di 1,1 miliardi di metri cubi, sufficiente a raggiungere il target di consumo al 2020 del 10% sul totale dei carburanti. Secondo le stime rilasciate oggi a Biogas Italy, le potenzialità del biometano saranno maggiori, ma siamo disponibili a rivedere i limiti dovesse esserci uno sviluppo più consistente.”

February 24, 2017. **Italy a new hotspot for biogas upgrading?** “The Italian decree from 2013 regarding biomethane regulations will be replaced by a new one in early 2017. The new decree will favour biomethane as transport fuel. **Italy is the most advanced European country when it comes to number of filling stations and use of methane (natural gas) as vehicle fuel.** Having the infrastructure in place and a public awareness of using methane as vehicle fuel Italy has already overcome the two main barriers for large scale implementation of biomethane as vehicle fuel. The NGV fleet and number of filling stations continues to grow. 885,000 NGVs in 2014 compared to 970,000 NGVs in 2015. 1,100 CNG and L-CNG/LNG stations in 2015 compared to 990 in 2014. Almost 75% of the European NGV fleet is in Italy (...) Italy has 1,391 biogas plants and as the feed-in tariff for green electricity is phased out it’s natural to look for biomethane dedicated to the transportation sector as an alternative. This implies a huge opportunity for biogas upgrading companies.”

February 23, 2017. **Report Analyzes the Use of Biogas-Derived Electricity To Power Electric Vehicles.** “With joint funding from the U.S. Department of Energy’s Office of Strategic Programs, Bioenergy Technologies Office (BETO), and Vehicle Technologies Office, Oak Ridge National Laboratory (ORNL) published a report titled **Analyzing the Impacts of a Biogas-to-Electricity Purchase Incentive on Electric Vehicle Deployment with the MA3T Vehicle Choice Model.** Using a vehicle consumer choice model, MA3T, which ORNL developed, the report provides an independent analysis of the potential implications of establishing an electric vehicle (EV) purchase incentive with renewable fuel credits under the U.S. Environmental Protection Agency’s (EPA’S) Energy Independence and Security Act (EISA). Under EISA, renewable fuels can be produced using a wide range of methods, called pathways, and EPA approves each pathway individually. EPA tracks how much renewable fuel is generated and used by monitoring credits called renewable identification numbers (RINs). **EPA approved a pathway for biogas-derived electricity to be used in EVs, and under its recently proposed Renewable Enhancement and Growth Support rule, EPA is considering which one of four proposed parties should be given credit for electricity RIN (eRIN) generation under this biogas-to-electricity pathway (eRIN pathway): (1) EV owners, (2) public charging stations, (3) electric utilities and vehicle manufacturers, or (4) third parties using the available data sources.** The ORNL report showed that using the value created by the eRIN pathway to reduce the purchase price of vehicles could accelerate the deployment of EVs, an important strategy to decarbonize the transportation sector. This analysis could be used to understand the factors that affect eRIN generation and the conditions that could best advance both biogas production and EV deployment. BETO strongly supports waste-to-energy technologies such as biogas generation, and recently published a report showing that biogas alone could produce approximately 0.4 quadrillion of the 97.7 quadrillion British thermal units of U.S. total annual primary energy consumption. Waste-to-energy projects are a key component of BETO’s portfolio and can help achieve the goal of developing domestic, cost-competitive biofuels and bioproducts from cellulosic biomass.”

context:

demand  (...) This policy could also incent additional biogas - derived electricity production if some of the credit value is shared with biogas electricity producers. A recent study estimated the biogas-derived electricity potential at 41 TWh/year.”

February 23, 2017. **Sweden: Biogas vehicles in environmental zones - of course!** by Evergreen Hill, Tekniska verken. “Transport Agency has proposed a new regulatory framework for so-called environmental zones. The purpose of the environmental zones is to improve air quality in urban centers and particularly environmentally sensitive areas. Poor air in these areas is a huge challenge that is also highlighted in several of the national environmental objectives. The problem with the Transport Board's proposal is that it risks becoming another nail in the coffin for the hard-pressed Swedish biogas industry and ultimately our climate (...) Today, market conditions for Swedish biogas are very difficult. Fossil fuels are cheap while various schemes and subsidies clearly promotes electric vehicles. Continuing this trend risk the Swedish biogas production will be phased out. A ban on performing gas vehicles in environmental zones Class 3 will further impair the competitiveness of biogas with negative climate effects. The largest biogas users in Sweden's public transport company, car sharing in the public sector as well as taxi companies. These can all be expected to want to drive in the environmental zone 3. Class A ban on biogas vehicles in environmental zones Class 3 will control its players the choice of fuels other than biogas. It will also affect the vehicle manufacturers' investment in gas vehicles as well as private individuals incentives to buy gas vehicles. Therefore gas vehicles in Sweden be allowed to run in the environmental zone class three. That exception would instead benefit Swedish biogas production, which is a strategic national interest especially from the supply point of view.”

February 15, 2017. **Germany: Cabinet decision on energy taxation.** Decision of the Federal Cabinet amending the Energy Tax and Electricity Act. The President of the Association of Biogas (Fachverband Biogas e.V.), Horst Seide, explains today's decision by the Federal Cabinet to amend the Energy Tax and Electricity Act: “With the draft legislation adopted today by the Federal Cabinet, the tax reduction for biomethane as a fuel is finally extended. This fulfills an important requirement of the biogas specialist association. The extension is overdue and should have been implemented long ago. Now a fast adoption of the law in the Bundestag is necessary so that today's and future users of biomethan know what they are. Further steps are necessary. A lever for increased use of biomethane is the biofuel rate in Germany. For the Europe 2020 target of 10% renewable energy in the transport sector, Member States can set a specific subquota of 0.5% for particularly advanced biofuels. It is therefore incomprehensible why the Federal Ministry of the Environment wants to reduce this quota to 0.05 per cent. We demand a biomethane rate of at least 0.15 percent in Germany. This is roughly equivalent to today's market. For what many do not know: already today it brings biomethane to a share of approx. 20 percent of the fuel sales for natural gas vehicles. Climate-friendly mobility of tomorrow depends on a mix of renewable energies, including biomethane. The biomethane used in Germany as a fuel brings about a greenhouse gas reduction of more than 84 percent, according to a report by the Federal Institute for Agriculture and Food (BLE).”

February 14, 2017. **Finland: Bio-buses join Vaasa fleet.** “Twelve biogas-fuelled buses join the City of Vaasa's public transit system this week. Using eco fuel created from food leftovers and waste water, the buses will help bring the city's public transit carbon dioxide emissions to almost zero (…) The new buses will use biogas created from the city’s food waste and wastewater. The biogas buses will reduce the amount of diesel needed to run the city's public buses by 280,000 litres a year. Their carbon footprint will be in the same range as buses that use windpower.”

February 9, 2017. **Europe's 1st fleet of SCania CNG-fuElled trucks with 500-mile range.** “CNG Fuels, the supplier of renewable biomethane fuel, and Waitrose, today announced that the supermarket group has introduced Europe’s most advanced fleet of CNG (compressed natural gas)-powered trucks with a range of up to 500 miles. Ten Scania-built trucks use twin carbon fibre tanks
which store gas at 250 bar of pressure to increase range from 300 to up to 500 miles. **This new Waitrose fleet will use game-changing technology** developed jointly with Scania and Agility Fuel Solutions, the leading CNG fuel systems and cylinders company in North America. This will help overcome concerns about the distance that CNG-powered trucks are able to cover before refuelling. It also makes it easier for fleet operators to switch to renewable biomethane CNG, the most cost-effective and lowest carbon alternative to diesel for heavy goods vehicles (HGVs).”

February 9, 2017. **Le 7 février 2017, Ségolène Royal a transmis à la Commission européenne le cadre d’action français pour le développement des carburants alternatifs** par Gilles Durand, AFGNV. “Ce document précise, dans un chapitre intitulé "Éléments de contexte", que “sur la base des projets dont ils ont connaissance, les acteurs de la filière GNV estiment le nombre de points de ravitaillement en GNV disponibles à fin 2018 à 180 (128 points GNC et 46 points GNL)”. Le document précise également que “à l’horizon 2020, le réseau estimé par les acteurs de la filière serait de 250 points de ravitaillement GNV (40 points GNL et 210 points GNC). A 2025, ce réseau comporterait a minima 300 points de ravitaillement GNV (50 points de ravitaillement GNC supplémentaires par rapport à 2020)”.

February 7, 2017. **Cadre d’action national pour le développement des carburants alternatifs dans le secteur des transports et le déploiement des infrastructures correspondantes.** Adopté en application de la directive 2014/94/UE du 22 octobre 2014 sur le déploiement d’une infrastructure pour carburants alternatifs (...) **Le GNV et le bioGNV, en particulier sous leur forme comprimée, sont dorénavant reconnus par un grand nombre d’acteurs en France comme le principal carburant alternatif au gazole, disponible à court terme et technologiquement mature pour le transport routier de marchandises. L’achat d’un poids lourds au GNV présente un surcoût par rapport à un véhicule gazole, mais les écarts de prix actuels des carburants, en faveur du GNV, permettent d’amortir ce surcoût en quelques années seulement. Le GNV permet de répondre à des contraintes environnementales croissantes et sa densité énergétique (d’autant plus grande lorsque le GNV est sous sa forme liquéfiée) autorise l’emport de charges lourdes et leur transport à grande distance. Plusieurs transporteurs français et leurs organisations représentatives, ainsi que de grands donneurs d’ordre, en particulier des chargeurs de la grande distribution, développent l’usage du GNV et du BioGNV. Plusieurs énergéticiens implantés en France se mobilisent également pour développer un réseau de ravitaillement ouvert au public accessible aux poids lourds, condition indispensable au bon développement du GNV (...) **La publication attendue de la norme EN 16732-2, spécifications du biométhane pour utilisation dans le transport, favorisera le développement du bioGNV.”

February 3, 2017. **Autoridades reciben a brasileños que llegaron en auto a biometano. “Estudian las posibilidades de que ese biogás pueda tambiém emplearse en Uruguay. Tras establecer un récord al viajar casi 900 kilómetros desde la ciudad de Montenegro, en Río Grande del Sur, a Montevideo en un vehículo impulsado por biometano, dos científicos brasileños se reunieron el viernes 3 con las autoridades uruguayas, que tantean las posibles aplicaciones de este biogás en el mundo agropecuario (...) Es por ello que las autoridades se interesaron por el proyecto brasileño “Desafio Montenegro-Montevideu”, puesto que el biometano es un combustible que reúne las características del gas natural con "la ventaja de ser producido a través de procesos provenientes de fuentes renovables", como por ejemplo residuos de origen orgánico (estiércoles y residuos de agroindustrias), según sus impulsores. En este sentido, el presidente del Instituto Surear para la Promoción de la Integración Latinoamericana, Fabrizzio Cedraz, y el doctor especialista en bioenergía de la Facultad Tecnología y Ciencias (FTC) de Brasil, Alexandre Wentz, arribaron el jueves 2 a Montevideo tras viajar durante 856 kilómetros para demostrar el potencial de este gas.”

February 2, 2017. **La mobilité au gaz invitée au salon Biogaz Europe 2017** par Philippe Schwoerer, Gaz Mobilite. “a mobilité au GNV était mise en évidence au salon Biogaz Europe qui
s’est tenu à Rennes (35) les 25 et 26 janvier 2017, par le biais d’une conférence et par l’exposition de quelques modèles de voitures dont certaines étaient proposées à l’essai. Les visiteurs du salon étaient accueillis par une Volkswagen Passat SW de l’équipementier Bauer Folien venue d’Allemagne en étant alimentée au BioGNV. Une affiche précisait que le trajet de 1.000 kilomètres a été effectué avec 55 euros de gaz, en émettant respectivement en moins 15 et 25% de CO2, ainsi que 95 et 53% d’oxydes d’azote, que ses modèles équivalents diesel et à essence. Un autre document derrière les essuie-glaces complétait le tableau : 36 et 75% de rejets en moins en hydrocarbures toxiques. Concernant les particules fines : une baisse de 35% par rapport au modèle alimenté à l’essence, et la quasi totalité des suies supprimées si l’on compare avec celles émises à l’échappement de l’équivalent diesel. En outre, toujours par comparaison avec ce dernier, une disparition presque totale du dioxyde de soufre (...) Ainsi, parcourir 100 kilomètres avec une voiture du type de la Volkswagen Passat SW coûterait : 12,63 euros d’essence (7,8 litres), 8,02 euros de gazole (5,5 litres), 6,54 euros de GPL (8,5 litres), mais seulement 4,87 euros de biogaz pour 4,5 kilos. Le raisonnement inverse, également proposé, permettait de connaître l’autonomie pour 10 euros de carburant : 100 kilomètres à l’essence, 130 au gazole, 180 au GPL et 230 au biogaz.”

February 1, 2017. New report suggests biogas for heavy transport by Danish Energy Agency. “According to a new report by Ea Energy Analyses and University of Southern Denmark (SDU), biogas is expected to become cheaper and more environmentally friendly for heavy transport than liquid biofuel.”