APPLIED NANOPARTICLES Monthly Anaerobic Digestion Newsletter October 2015 Compilation & Overview



Turning Point: Renewables aren't just the best option for the environment

October 22, 2015. <u>Energy companies divided over renewable energy in Brussels</u> by Hendrik Steringa, energypost. "The lobby of the conventional energy sector is still very influential in Brussels, but it's increasingly becoming split over renewable energy. Some of the incumbent companies are trying to slow down the development of renewables, others want to encourage them. At the same time, renewable energy lobbyists are becoming increasingly professional, catching up with the lobbyists for the conventional energy sector (...) They want to slow down the process, not stop it, because they realise it can't be stopped anymore."

October 22, 2015. Lost in Transition: How the energy sector is missing potential demand destruction by Carbon Tracker. "This report is designed to challenge the conventional thinking and linear models which dominate the current scenarios for energy futures. The greatest risks and opportunities will arise from more dramatic shifts rather than business as usual or incremental change. There is increasing investor interest in what analysis is useful to test business strategies and demonstrate resilience in a low carbon future." Carbon Tracker's senior analyst and co-author, Luke Sussams, said: "The incumbents are taking the easy way out by exclusively looking at incremental changes to the energy mix which they can adapt to slowly. The real threat lies in the potential for low-carbon technologies to combine and transform society's relationship with energy. This is currently being overlooked by Big oil , coal and gas."

EU28 Job Distribution in the Bioenergy Sector in 2012 [%]

Solid biomass	58%
Biofuels	23%
Biogas	14%
Waste	5%

489.880 jobs



October 21, 2015. Les bioénergies en Europe pèsent 56 milliards d'euros et 1/2 million d'emplois par Frédéric Douard, Bioenergie international. "A la veille des négociations de la COP21, les discussions sur les options concrètes pour atténuer les changements climatiques sont une priorité. À cet égard, l'Association européenne pour la biomasse (AEBIOM) vient de publier son <u>rapport statistique annuel</u> le 20 octobre 2015. Ces statistiques confirment que la bioénergie a beaucoup à offrir à l'Europe : alors que peu connu en 2015, la bioénergie représente pourtant déjà plus de 60% de toute l'énergie renouvelable consommée dans UE28." October 21, 2015. <u>Does climate change affect income?</u> New study sees robust link by Pete Spotts, The Christian Science Monitor. "In the runup to a global climate conference in Paris, study finds evidence that economic performance in all regions is tightly linked to climate change."

October 21, 2015. <u>Calculator shows planned emissions cuts can't prevent dangerous global</u> <u>warming</u> by Hayley Dunning, Imperial College London. "A new tool that assesses countries' promises on cutting greenhouse gas emissions ahead of a major meeting in Paris shows stronger action is needed. Their calculations predict that even with the proposed cuts, global warming could still reach up to four degrees Celsius (4°C) warming by 2100, overshooting the 2°C warming threshold that experts have agreed could prevent climate change from becoming "dangerous and irreversible"



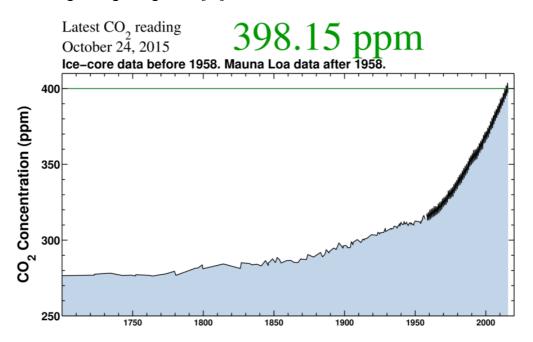
October 19, 2015. <u>Norway's oil-rich capital first to divest from fossil fuels</u> by Alex Pashley, Climate Home. "The capital of Europe's largest holder of oil and gas reserves blacklisted all fossil fuel assets, as its new-look city council set out a greener agenda (...) The move follows Norwegian lawmakers' decision to divest its huge \$890bn sovereign wealth fund of an estimated \$8bn coal holdings in June. That gave a spur to the global divestment campaign, which last month had 450 institutions in 43 countries managing \$2.6 trillion pulling money out of fossil fuels, according to a study (...) Arild Hermstad, leader of activists Future in Our Hands, said: "There's a strong symbolism when the capital city of our oil producing nation says "No" to investing in fossil fuels. It shows that fossil fuels are history, and that shifting away from them, and towards renewables, is the future."

October 19, 2015. <u>Thinking the Unthinkable: Strategy Options for an Age of Disruption in the</u> <u>Energy Industry</u> by Andreas de Vries, European Energy Review. "The Oil & Gas industry has been remarkably stable throughout its 150 or so years of existence. While the technologies applied to finding, developing and processing the products that are the core of the industry have indeed changed substantially, the core products themselves have never been seriously challenged by outsiders, by new solutions for humanity's energy need. Coal, crude oil and natural gas have remained king, today providing 82% of the world's energy needs. Since the global business environment is changing ever faster, as evidenced by the fact that the average lifespan of companies is shortening, there is a lot of discussion about how much longer this status quo in the energy industry will remain. Much less discussed, however, is the question what Oil & Gas companies can do strategically to ensure they remain successful, even if disruption were to hit (...) Firstly, establish a venture fund with the task of investing in promising companies in industries that have the potential of disrupting the energy industry (...) Secondly, expand the internal innovation horizon."

October 16, 2015. <u>Oil and Gas Companies Make Statement in Support of U.N. Climate Goals</u> by Stanley Reed, New York Times. "The public declaration by a group called the Oil and Gas Climate Initiative was an effort to convince an increasingly skeptical world that energy companies, whose fossil fuels are a big source of greenhouse gases, are serious about delivering cleaner energy and combating climate change. But **the impact of that statement might be limited**. None of the biggest American oil companies signed the declaration or were part of the group. The companies that were involved made no specific commitments toward helping to meet the climate challenge. Instead, they indicated they would await government regulations to chart the way forward."

October 16, 2015. <u>Oil & Gas Climate Initiative: Joint Collaborative Declaration</u>. "As the international community heads towards COP21, we, the member companies of the Oil and Gas Climate initiative (OGCI), who together provide nearly 10% of the world's energy, express our collective support for an effective global climate change agreement." Britain's BG Group and BP, Italy's Eni, Mexico's Pemex, Spain's Repsol, Saudi Aramco, Norway's Statoil, and French 's Total.

October 13, 2015. <u>Oil unlikely to ever be fully exploited because of climate concerns – BP</u> by Damian Carrington, The Guardian. "The world's oil resources are unlikely to ever be fully exploited, BP has admitted, due to international concern about climate change. The statement, by the group's chief economist, is the clearest acknowledgement yet by a major fossil fuel company that some coal, oil and gas will have to remain in the ground if dangerous global warming is to be avoided. "Oil is not likely to be exhausted," said Spencer Dale in a speech in London. Dale, who chief economist at the Bank of England until 2014, said: "What has changed in recent years is the growing recognition [of] concerns about carbon emissions and climate change."



October 12, 2015. The most pessimistic climate change scientist has had a sudden change of heart by Tom Bawden, Independent. "Johan Rockström, who shocked the world with a bleak prediction in 2009, has had a dramatic change of heart (...) Renewable energy is being deployed on a massive scale and, crucially, at a cost roughly comparable to fossil fuels."

October 11, 2015. Investors Call Upon Governments to Secure a Clear, Long-Term Goal at <u>COP21</u> by We Mean Business. "Almost 400 institutional investors representing more than \$24 trillion in assets relased a statement in top-tier business and finance journals around the world, today. In a previous letter to the G7 governments, investors noted that with the right market signals from policy makers, investment in low-carbon and climate resilient opportunities can flow and climate impacts and resulting economic damages can be mitigated."

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\$24 TRILLION IN ASSETS

CALL FOR A CLEAR, LONG-TERM GOAL AT COP21

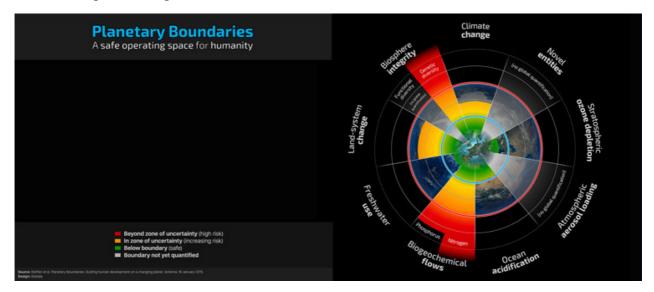
October 10, 2015. <u>Top 5 Signs cheap Renewable Energy is taking the World by Surprise</u> by Juan Cole. "

October 8, 2015. <u>Why we'll sue CEOs who ignore climate change</u> by James Thornton, The Guardian. "Environmental lawyers have vowed to pursue **legal action against directors who fail to protect their investors from climate risks**."

October 7, 2015. For the first time, a top coal industry executive faces criminal charges by By Mason Adams, Grist. "It's high time we hold the coal industry and its executives responsible for not following health standards and environmental standards. Whether or not the trial will lead to that depends on the verdict. At least the conversation is happening now."

October 7, 2015. <u>Wind energy is now as cheap as natural gas, and solar is getting close</u>. "Wind power is now comparable in price to fossil fuels, and solar is well on its way, according to a new report, by Bloomberg New Energy Finance, that confirms earlier predictions that renewables aren't just the best option for the environment - they're unequivocally the smartest long-term investment you can make on energy. "You start to go from a world where renewables are expensive, to a world where renewables are actually cheap."

October 6, 2015. <u>Solar and Wind Just Passed Another Big Turning Point</u> by Tom randall, Bloomberg Business. "It has never made less sense to build fossil fuel power plants. Wind power is now the cheapest electricity to produce in both Germany and the U.K., even without government subsidies, according to a new analysis by Bloomberg New Energy Finance (BNEF). It's the first time that threshold has been crossed by a G7 economy." October 2, 2015. This Is Humanity's Most Important Year Ever by Jo Confino, Huffington Post. "For those who believe we are nearing the tipping point of runaway climate change, the remainder of 2015 is being seen as perhaps our last chance to save the world as we know it. With the United Nations' global climate talks in Paris in December and the adoption last month of the global Sustainable Development Goals, Johan Rockström, the executive director of the Stockholm Resilience Centre, tells me "this is the most important year for humanity ever." Rockström, who developed the concept of mankind's "planetary boundaries," states that what scientists are now able to say with certainty, which was not the case even five years ago, is that as a species, we have the power to disrupt the entire planetary system. Pointing out that "we can no longer operate at this scale and act as planetary stewards," Rockström says we are coming close to tipping points on a local, regional and global scale."



October 2, 2015. <u>Climate change threatens global financial crash</u> by Paul Brown, Climate News Network. "The world's most influential banker says an orderly switch from fossil fuels to renewables is needed to avoid turmoil on world stock markets (...) Mark Carney, chairman of the G20 countries' Financial Stability Board and Governor of the Bank of England, particularly warns about the effects on the market if panic selling occurs and there is a plunge in value of shares in fossil fuel companies and industries that produce a lot of carbon dioxide. These companies, some of the world's largest, control one-third of stock market assets. If investors realise these stocks are overvalued and try to sell them all at once, it will cause chaos, Carney said. (...) "The weight of scientific evidence and the dynamics of the financial system suggest that climate change will threaten financial resilience and longer-term prosperity"

September 30, 2015. Estudio del Impacto Macroeconómico de las Energías Renovables en España en 2014, editado por la Asociación de Empresas de Energías Renovables-APPA. "Las renovables ahorraron 15.899 millones de euros al sector energético en 2014 .Ahorraron 8.794 millones de euros al evitar la importación de 20,5 millones de tep y la emisión de 54,4 millones de toneladas de CO2. Abarataron el precio del mercado diario, "pool", en 7.105 millones (29,2 euros Mwh). La retribución regulada (antiguas primas) fue de 5.238 millones de euros, un 22% menos que la recibida en 2013. El ahorro en el pool fue 1.867 millones superior a la retribución regulada recibida por las renovables. El sector empleó a 70.750 personas y perdió 22.665 empleos. El ahorro generado por las renovables en la última década en el sistema eléctrico ha sido 32.199 millones mayor que la retribución regulada recibida. El sector demanda un Pacto de Estado para un nuevo modelo energético basado en renovables y un marco estable y predecible sobre el que planificar su futuro."

The Battle of Britain around the Renewables

October 23, 2015. <u>Anaerobic Digestion Industry "Fighting To Survive"</u> by Darrel Moore, CIWM journal. "The Anaerobic Digestion & Bioresources Association (ADBA) has today strongly objected to DECC's plans to massively cut back government support for new AD plants (...) ADBA's Chief Executive, Charlotte Morton, said: "DECC's proposed deployment cap represents just 72.7MW over three and a quarter years – but to put this in context the AD industry deployed 47.9MW from 89 plants under the FIT scheme in 2014 alone (...) DECC's current proposals would prove disastrous for bill payers – prompting higher consumer bills in the long-term, a greater reliance on energy sourced from volatile parts of the world, an uncertain future for UK farming resilience, and a carbon abatement bill in the billions. The Energy Secretary suggests that these decisions are aimed at 're-setting' government policy to deliver cost effective baseload energy – but ADBA has provided evidence showing how **AD will offer cheaper baseload energy than new nuclear by the time Hinkley Point C is delivered**, providing localised generation without the risk of a single large development."

October 20, 2015. <u>UK: REA responds to Amber Rudd's first speech as Secretary of State to the</u> <u>Conservative Conference</u>. "The Renewable Energy Association urges national Energy Secretary to set out long term plan towards a low carbon economy (...) Head of Policy and External Affairs of the REA, James Court said: "The recent government announcements are risking the loss of jobs, expertise and investment at a crucial time. We need the Secretary of State to give confidence that the UK is still open for renewables, because we have seen nothing but negative announcements since the election."

October 19, 2015. <u>Hundreds of renewable energy companies could be forced out of business</u> <u>due to 'dramatic' subsidy cuts</u> by Dean Kirby, Independent. "Tens of thousands of jobs could be lost (...) The Renewable Energy Association (REA), a trade association representing renewable energy producers, says it has tracked 11 major policy changes by the Conservatives since the general election which are having or will have a "negative impact" on the renewable energy industry. James Court, the REA's head of policy, said: "This represents the UK turning away from renewables, which is surprising given the extraordinary decline in costs and increases in technological efficiency that have been achieved over the past five years" (...) A spokeswoman for the Department of Energy and Climate Change said: "Our priority is to keep bills as low as possible for hard-working families and businesses. Government support has already driven down the cost of renewable energy, which will continue to play a role alongside new nuclear power, as we provide cleaner and more secure energy for future generations."

October 19, 2015. <u>UN scientist Jacquie McGlade raps UK over renewables</u> by Roger Harrabin BBC. "Cuts in support for renewable energy in UK have been criticised by UN's chief environment scientist J.McGlade said UK was shifting away from clean energy as the rest of the world rushed towards it. She said the cuts in renewables subsidies, coupled with tax breaks for oil and gas, sent a worrying signal to the coming UN climate summit in Paris (...) Since the announcements of subsidy cuts in the summer, three solar firms have collapsed, more than 1,000 jobs have been lost in the clean energy industry and energy investors have started to drain away from UK"

October 1, 2015. Joint Statement by renewable energy associations on closure of Feed-in Tariff preliminary accreditation. "On behalf of the renewable energy sector, and many thousands of businesses, community groups and investors, our organisations have come together to call on the Department of Energy and Climate Change to review urgently its decision to remove preliminary accreditation from the Feed-in Tariff." The statement has been signed by the STA, REA, RenewableUK, Scottish Renewables, RegenSW, Community Energy England and the Anaerobic Digestion and Bioresources Association.

The Renewable Natural Gas is the Future of Transportation ?

October 27, 2015. <u>Biogas Engineer: The cow manure can get a better economic return than</u> <u>milk</u>. "Biogas cars has been talked about for a long time, but they are still low, around 2000 [in Finland]. In part the background is the chicken or the egg phenomenon: when there is no refueling facilities, there are no cars; and when there are no cars, no refueling facilities."

October 26, 2015. <u>Une révolution nommée biogaz</u> par Jean-Jacques Arène, Info Magazine. "Le biogaz- et son dérivé le biométhane- produits avec des eaux usées et les déchets locaux, **vont- ils devenir l'énergie du futur ?** Le groupe Suez y croit (...) L'Europe produit actuellement l'équivalent 14 TWh (térawattheure) d'énergie électrique à partir du biogaz. A elle seule, l'Allemagne réalise la moitié de ce volume, et la France, seulement 3 à 4%... Un retard que Suez entend combler en partie (...) « La France va faire des progrès très vite », a pronostiqué Thierry Mallet, « **2015 est l'année du décollage du biométhane** ». Suez exploite 170 sites dans le monde, et va participer à plus de 100 projets de valorisation du biogaz dans l'eau et les déchets d'ici 2020. La loi sur la transition énergétique fixe un objectif de 10% de biogaz dans la consommation française de gaz naturel à échéance de 2030. **Et si les trois-quarts des Français consommaient ce gaz vert en 2050 ?** GRDF, gestionnaire du réseau de gaz en France envisage cette possibilité..."

October 24, 2015. <u>Benelux : vers un réseau transfrontalier de stations GNV</u>. "Les représentants belges, néerlandais et luxembourgeois viennent de s'accorder sur la mise en place d'une politique commune en matière d'infrastructures pour carburants alternatifs et visent la création de corridors transfrontaliers."



October 22, 2015. OrangeGas Reaches 60th Biomethane (Green Gas) Station in Netherlands. "Green gas is the future, we are convinced of that (...) The ambition of OrangeGas goes further. "There's a future in sustainable driving. The range of cars that run on alternative fuels is increasing. And sustainable driving is getting cheaper. That's why we have the 'Orange Dream': we want to open stations where only renewable fuels are offered: Green Gas, electric charging stations and hydrogen in the future. We also want to expand to two other countries in Europe." October 22, 2015. Locminé. La Tournée Verte livre en roulant au carburant 100 % décarboné. "Lancé en 2012 en Île-de-France, ce service de messagerie arrive en Bretagne. Les fourgons fonctionnant au Bio GNV (Gaz naturel véhicules) font le plein à Locminé."

October 21, 2015. <u>Biogaz en Suède: les bus de Stockholm roulent grâce aux eaux usées</u> par Dominique Cettour-Rose, FranceTVinfo. "A Stockholm, 36% des autobus circulent grâce aux eaux usées de la ville et aux graisses des restaurants. Ces déchets sont triés puis fermentent dans les bassins d'une usine de recyclage avant d'être injectés dans les réservoirs des bus sous forme de biogaz – ou biométhane – utilisé comme carburant (...) A noter que contrairement à la Suède, la France interdit l'injection directe de biogaz dans le réservoir des autobus. Le gaz produit doit obligatoirement être injecté dans le réseau de gaz de ville, avant d'être utilisé comme carburant dans les transports et comme chauffage pour les logements."

October 21, 2015. <u>Le bioGNV, un carburant local et 100 % renouvelable</u>. "Utiliser le GNV comme carburant aujourd'hui, c'est bien. Utiliser du bioGNV, c'est encore mieux. C'est pourquoi, chez GRDF, on s'implique dans le développement de ce carburant d'avenir encore plus écologique!"

Rouler au gaz naturel / biogaz, économiser de l'argent

En comparaison avec 1 Litre de'essence ou de diesel, un kilogramme de gaz naturel / biogaz permet de parcourir une distance plus grande:

1 kg de gaz naturel/biogaz est égal à:	1.47 Litre	d'essence* ou
	1.35 Litre	de diesel

Certes, le prix d'un kilo de gaz naturel / biogaz semble plus élevé que celui d'un litre d'essence ou de diesel. Pourtant, le gaz naturel permet d'économiser comme la comparaison suivante démontre:

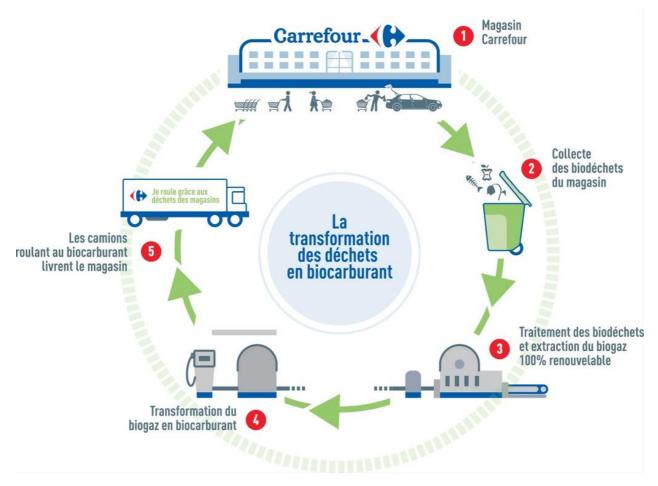
	gaz naturel	essence	gaz naturel	diesel
Prix à la colonne (03/2015)	1.55/kg	1.48/I	1.55/kg	1.58/I
Prix de comparaison	1.05/I		1.15/I	
Avantage de prix	env. 30%		env. 25%	
Avantage par année ou 20'000km	env. 660		env. 350	

* consommation: 8.0/l/100 km (essence), 5.5kg/100 km (gaz naturel), 6.5l/100 km (diesel)

October 20, 2015. <u>Back to the Future II: What did it get right and wrong?</u> By Leo Kelion, BBC. "It's Back to the Future Day - the date Marty and Doc crashed the future in the second of the three time-hopping sci-fi adventure films (...) Throwing your rubbish into a car's Mr Fusion energy converter to provide it with power remains fanciful. But there have been **moves towards powering vehicles with waste**. Bristol and Bath recently started running buses powered by treated thrown-away food and sewage"

October 19, 2015. <u>Nouvelle déduction fiscale pour les camions GNV et biométhane</u>. "Dans le cadre des discussions sur le projet de loi finances pour l'année 2016, l'Assemblée Nationale vient d'adopter un nouvel amendement en faveur des camions fonctionnement au GNV et au biométhane. Objectif : pousser l'investissement des entreprises du secteur routier vers des solutions plus respectueuses de l'environnement."

October 18, 2015. **Quand Carrefour joue les bons élèves de la lutte anti-gaspillage** Par Marina Torre, La Tribune. "Le numéro trois mondial de la distribution dévoile ses coulisses… et ses poubelles. Une opération transparence à quelques semaines de la COP21 qui soulève toute la complexité de la gestion des déchets dans ce secteur (...) Pour tous les déchets organiques qui ne peuvent vraiment pas être commercialisée, l'hyper de Villeneuve-la-Garenne teste la méthanisation. Entre 5 et 6% des produits organiques sont ainsi récoltés et récupéré dans un compost pour produire du biogaz"



October 15, 2015. <u>Gaz naturel, biogaz, pourquoi ces énergies facilitent la transition</u> <u>énergétique ?</u> par Jérôme Cormary, Enerzine. "Début septembre, Ségolène Royal a inauguré à Strasbourg une station d'épuration capable d'injecter du biométhane dans le réseau de gaz de ville. Cette station serait en mesure d'honorer les besoins énergétiques de 5 000 logements à basse consommation et préfigure un modèle qui devrait se multiplier dans toute la France d'ici à 2020. Le gaz naturel et son pendant renouvelable, le biogaz, s'imposent peu à peu comme les moyens incontournables pour la France de réussir sa transition énergétique."

October 15, 2015. <u>Biogas can replace one-sixth of the world's fuel</u> by Monica Hedlund, Miljö&Utveckling. "Residues from the forest products industry can be used to produce biogas for cars. It allows biogas to both climate-friendly and cheap fuel - but everyone is waiting for the politicians." October 14, 2015. <u>Volkswagen veut améliorer ses motorisations GNV</u>. "Annonçant une série de mesures pour sortir de la crise du diesel, le groupe Volkswagen souhaite mettre l'accent sur les carburants alternatifs et annonce l'amélioration de ses motorisations gaz naturel."

October 12, 2015. **Rally in Stuttgart - petition urges support for natural gas vehicles**. "Under the motto **"Flying the flag for natural gas mobility"** was held a rally to Stuttgart. More than 70 natural gas vehicles were on site. The highlight of the event was the handing over of a petition to State Secretary Peter Hofelich by the Ministry of Finance and Economics Baden-Württemberg (...) The petition calls for, inter alia, the conversion of state-owned fleet to natural gas vehicles, the purchase of natural gas-powered buses, and an adaptation of the network charges to support the acceptance or load behavior of natural gas filling stations account." Foto: erdgas mobil BW



October 12, 2015. First European Biomethane Conference: Signal for transnational cooperation. "More than 130 players in the biomethane industry from 15 countries cameat the first European Biomethane Conference – EBC of the German Energy Agency (dena) in Berlin (...) "Biomethane can make an important contribution to the success of the energy transition at EU level," said the chairman of dena CEO Andreas Kuhlmann in his opening speech. "With this event, the dena provides the actors of the European biomethane industry the opportunity to exchange ideas and to network. Our goal is to make biomethane a European success story" (...) Biomethane is produced in 17 countries and in more than 340 plants and fed into the public natural gas grid or used directly as fuel. To take full advantage of the immense potential of biomethane in Europe, all the major players in Europe need to network with each other. This key finding comes from the already successfully completed EU project "Green Gas Grids" and gave rise to the orientation of the EBC."

October 11, 2015. <u>Renewable Natural Gas (Biomethane) Production</u>. "Renewable natural gas (RNG), or biomethane, is a pipeline-quality gas that is **fully interchangeable with conventional natural gas and thus can be used in natural gas vehicles**. RNG is essentially biogas (the gaseous product of the decomposition of organic matter) that has been processed to purity standards. Like conventional natural gas, RNG can be used as a transportation fuel in the form of compressed natural gas (CNG) or liquefied natural gas (LNG)."

October 8, 2015. <u>New test programme for biogas trucks</u>. "The Department for Transport has selected the Low Carbon Vehicle Partnership to manage a new test programme for the Low Carbon Truck Trial. The project will benchmark all the latest gas trucks for emissions including methane, carbon dioxide and fuel consumption, and compare gas vehicles (both OEM and retrofit conversions) with their direct diesel counterparts in a consistent manner using the latest measuring equipment over repeatable track cycles. The test process will follow the LowCVP accreditation method for low carbon truck technology, building on the recent Ricardo report which assessed test protocols for monitoring methane slip, a particular concern for methane-powered vehicles and a potential major contribution to their greenhouse gas impact. Andy Eastlake, Managing Director of LowCVP, said, "Biomethane is rapidly rising up the agenda as a major potential contributor to HGV fleet decarbonisation, but the evidence base is confused and vehicle technology (particularly with Euro-6) has developed extremely rapidly in the last couple of years as the Low Carbon Truck Trial has run." The project hopes to create a robust evidence base on gas use in HGVs, to provide a basis for the formation of long-term government policy options in this sector."

October 5, 2015. <u>A Decimoputzu impanti biogas per le auto elettriche</u>. "E' stata inaugurata a Decimoputzu la prima stazione di ricarica a impatto zero associata ad uno degli impianti produttivi associati al CIB - Consorzio Italiano Biogas, di Fabbrica Energie Rinnovabili Alternative. Un ciclo virtuoso di digestione anaerobica a disposizione dei veicoli elettrici 24 ore al giorno, sette giorni alla settimana."

October 1, 2015. <u>Le biométhane, star de la rentrée énergétique ?</u> par Julien Jormot, Les Smart Grids. "Aujourd'hui sort le « Book Climat », un guide élaboré et publié en ligne par le Collège des Directeurs du Développement durable (C3D). Ce document a vocation à recenser les « stratégies climat » de nombreuses entreprises, stratégies qui bien souvent font appel au biométhane pour être efficaces en matière de protection de l'environnement. Propre, le biométhane est présenté par de nombreux experts comme étant l'énergie d'avenir. Focus."



L'Europe des stations publiques GNV à 2 vitesses