

Scaling up carbon-neutral fossil fuels market: Voluntary standards vs. mandatory regulation

By James Atkin, Adam Hedley and Jake Williams

Takeaways

- Carbon-neutral fuel deals represent an interim solution during green energy transition
- Carbon-neutral labeling and offsetting are susceptible to being seen as “greenwashing”
- Industry initiatives to develop voluntary standards are in a nascent stage
- A global regulatory regime to regulate carbon-neutral fossil fuels is not likely soon



In the current climate of a clear and inexorable shift toward renewables and other low-carbon energy production, the notion of carbon-neutral fossil fuels sits uneasily. However, the green energy transition will take time and a huge amount of investment. In the meantime, fossil fuel producers and market actors are increasingly looking to interim green solutions; hence, the emergence of “carbon-neutral” fossil fuel deals.

“Carbon neutral” or “GHG neutral” in the context of a fossil fuel product broadly refers to the reduction and/or offsetting of carbon dioxide (and carbon dioxide equivalent greenhouse gases) emissions occurring as a result of the production, transportation, and use of the product in order to achieve a net-zero emissions outcome.

Needless to say, the use of the carbon-neutral label in this context is potentially dangerous territory. There is much debate about what the carbon-neutral label should specifically require in this context, and there is a spectrum of views on what types of emissions it should cover (some or all of scope 1, 2, and 3 emissions), how we should measure emissions, and whether reduction at source before resorting to offsetting the balance of emissions should be required.

These are all very much live issues in this nascent market, and the growth of the carbon-neutral fossil fuels market will no doubt be linked to whether consensus, or at least a majority view, is reached on them. This will be key to creating a credible carbon-neutral label, avoiding claims of greenwashing, and enabling comparability/fungibility of carbon-neutral products offered by different market actors.

A key question that underlies those issues is whether the carbon-neutral fossil fuels market can gain credibility and scale up through adherence to industry-driven voluntary initiatives or standards, or whether the time is now or in the near future for the market to be subject to mandatory regulation.

Market participants have only voluntary carbon-neutral standards to go on, with limited market consensus or prescription as to what the label should require and little cross-over between different types of fossil fuels. That situation typifies how other green products, such as green bonds, have tended to come to market and attract new entrants by enabling them to apply a green label without having to navigate a myriad of regulations to do so. However, as the markets for other green products have matured, the trend has shifted to a more top-down approach, whether via legislation or consensual self-regulation.



Voluntary vs. mandatory regulation: The carbon-neutral label

The voluntary framework for less carbon-intensive fossil fuels, such as LNG, is relatively well developed. Market initiatives are being developed across the globe, the most prevalent being the [carbon-neutral LNG framework of the International Group of Liquefied Natural Gas Importers \(GIIGNL Framework\)](#). To date, relatively few carbon-neutral LNG deals have transpired, and the development of voluntary initiatives, such as the GIIGNL Framework, is seen as one of the key stimuli for the market.

On the question of what the carbon-neutral label should require, the GIIGNL Framework caters to several decarbonization “pathways” for producers of LNG, with only one attracting the “GHG neutral” label (which requires emissions reductions at source, offsetting the balance of emissions, and a commitment to achieving long-term decarbonization). This enables LNG producers the flexibility to “opt-in” to the pathway most in accordance with their commercial aims. This is important given the potential for third-party gas suppliers and varying readiness to undergo intensive monitoring, reporting, and verification (MRV) of emissions.

By contrast, carbon-neutral voluntary initiatives for more carbon-intensive fossil fuels, such as crude oil, are significantly less developed. This is largely due to the increased offsetting costs associated with the higher carbon emissions generated from crude oil products, and the [heightened complexity in measuring carbon emissions from crude oil products](#). As a result, to date, we lack an industry-wide voluntary framework for carbon-neutral crude oil.

Despite the absence of an established voluntary framework, crude oil transactions have been reported to be carbon neutral. One of the first “carbon-neutral” crude oil transactions is credited to have occurred in [April 2021 between Lundin Energy AB and Saras S.p.A.](#) The producer used an independent MRV certification scheme provided by Intertek Group plc in order to determine carbon emissions and, for the carbon offsetting element, sourced carbon credits certified by the VCS. The use of MRV mechanisms that are not widely recognized was criticized by commentators, and such [transactions in the crude oil sector remain rare](#).

Calls have been made by those outside the fossil fuel industry, and some within, for governments to step in and develop a regulatory framework for carbon-neutral fossil fuels. The case from the outside is well rehearsed: calling fossil fuels carbon neutral is simply greenwashing, as they can never truly be carbon neutral by their intrinsic nature, and allowing the unregulated use of that label simply prolongs the life of the fossil fuel industry and delays the uptake of renewable alternatives. The case from within the industry is that mandatory regulation would level the playing field and may ultimately drive prices up as the ability to attach a credible, globally recognized carbon-neutral label to a cargo will add value.

It seems clear at this early stage in the development of the carbon-neutral fossil fuels market that any top-down regulation is likely to dampen the appetite for new entrants and stymie the growth of the market. Decarbonization is a relatively new concept for the fossil fuel industry and while many market actors have publicly set themselves net-zero targets, they are still developing their strategies to achieve those targets. The development of carbon-neutral products is a clear path to achieving net zero, and it is attractive at present in that it affords the flexibility to adopt an approach that aligns with a company’s wider decarbonization strategy.





Voluntary vs. mandatory regulation: Carbon offsetting

Regarding the carbon offsetting aspect of carbon-neutral fossil fuel deals, the voluntary carbon market (VCM) is now reasonably well established. It has seen huge growth in recent years in the wake of the Paris Agreement and, more recently, the Glasgow Climate Pact. The growth trajectory of the VCM has been unusual in the sense that it was initially driven by top-down schemes, principally the Clean Development Mechanism (CDM) and the Joint Implementation (JI) programs operated under the UNFCCC international treaty framework. Following the collapse in prices in 2008/09 and a long period of stagnation, the recent resurgence in the VCM has been driven by a proliferation of privately operated, largely unregulated VCM offsetting programs. However, this may soon change again as Article 6 of the Paris Agreement lays the foundations for a successor scheme to the CDM that would come under the auspices of the UNFCCC.

The generally accepted standard for high-quality carbon credits is that credits must represent [real, additional, verifiable, and permanent emission reductions or removals](#). Each of the major VCM programs has adopted that approach. However, it is worth noting that a degree of skepticism persists about the benefits of carbon offsetting and the efficacy of the VCM in reducing carbon emissions globally. In particular, critics have argued that the time lag between the emissions and the offsetting may reduce the stated effectiveness of credits and that offsetting encourages carbon leakage from one location to another rather than the overall reduction of emissions.

At a more transactional level, some still describe the VCM as the “wild west” of the carbon trading market, as it remains largely unregulated when compared to trading carbon allowances under-regulated schemes such as the EU Emissions Trading System (ETS). That is becoming less of an issue now as the market matures, thanks to various industry-led initiatives to develop governance frameworks for the VCM and standardized documentation for trading carbon credits based on the templates already widely used in the regulated carbon market.

Regarding the case for mandatory regulation in the VCM, we're already seeing examples of cross-over between the VCM and the regulated carbon market. The [Carbon Offsetting and Reduction Scheme for International Aviation \(CORSIA\)](#) is a mandatory global framework that provides a uniform, offset-based scheme for the regulation and reduction of carbon emissions from international aviation.

Unlike existing regulated schemes, such as the EU ETS, the compliance obligations of aviation operators under the CORSIA must be met entirely through the use of carbon credits sourced from the VCM. There is no CORSIA equivalent to the EU allowance (EUA) – the regulated compliance unit under the EU ETS. The VCM has responded to the CORSIA by creating carbon credit products that specifically meet the strict eligibility criteria set out in the CORSIA rules. The VCM has also attained accreditation under the CORSIA allowing the use of those types of carbon credit by compliance entities. In turn, this has allowed the labeling of those carbon credits as being “CORSIA compliant,” and such units generally trade at a premium to units that do not meet the CORSIA eligibility criteria.

The interaction between the VCM and the regulated aviation carbon offsetting scheme under the CORSIA may present a potential model for future carbon-neutral fossil fuels standards in terms of successful voluntary frameworks forming the basis of a mandatory and regulated carbon reduction scheme for fossil fuels.

The outcome for the carbon-neutral fossil fuels market could be that the unregulated VCM will continue to be unregulated and exist in parallel with the regulated carbon markets. If the carbon-neutral fossil fuels market becomes subject to regulation, then the VCM would respond to that by developing carbon credit products that, while unregulated, meet the regulatory eligibility criteria that allow their use within that regulated market. However, as noted above, it seems likely that any global approach toward regulation of the carbon-neutral fossil fuels market is some way off.



Authors

James Atkin



James works from our London office and his practice focuses on advising companies in the Oil & Gas, Energy and Infrastructure sectors with their international energy investments. Widely recognized as a leading energy lawyer and Band 1 ranked by Chambers Global, James advises clients in the energy sector on transactions in Asia, Australia, the Middle East, Africa and North America, and has extensive experience advising on large-scale energy projects, LNG sales arrangements, and energy-related mergers and acquisitions. In Chambers UK 2021, James has been described as “very knowledgeable of the industry, very easy to work with and very efficient.”

Adam Hedley



Adam is a partner in the London office and has 12+ years of experience advising on a broad spectrum of UK, EU and international environmental, health & safety, product compliance, carbon market and climate change law matters. He has a particular focus on the environmental aspects of ESG, and regularly advises on key topics, such as: climate change adaptation and mitigation projects; climate-related corporate reporting; carbon offsetting and neutrality objectives; renewables and alternative/sustainable fuels regulation, compliance and incentive schemes. He also regularly works on EU and international carbon and climate-related transactions, advisory matters and disputes, including emissions regulation, carbon trading and climate financing projects. His experience spans cap-and-trade schemes such as the EU, UK and Swiss ETS and regulatory / voluntary carbon offsetting schemes, including the UNFCCC CDM, the emerging Paris Agreement Article 6 mechanisms, CORSIA, REDD+, Gold Standard, VCS, etc. Adam is also experienced in EU renewable energy/fuel laws, and claiming/trading of UERs, RTFCs and other forms of green certificate. He has regularly been ranked as a “rising star” by *Legal 500* and as “up and coming” by *Chambers UK*.

Jake Williams



Jake is a senior associate (Australian Qualified) based in Reed Smith's London office focusing on EU, UK and international environmental, health & safety and product compliance law. Jake has experience in Australia, where he previously worked for a leading top tier environment and planning practice. He has experience in providing strategic and commercial advice to clients in a broad spectrum of sectors, including energy and natural resources, technology, infrastructure and development, chemicals, distribution and waste management. His practice involves complex regulatory and compliance advice on a broad range of environmental, health and safety compliance, approval strategies and permitting, decommissioning and remediation, sustainability, ESG and non-financial reporting, the transport of dangerous goods, the EHS aspects of corporate and real estate transactions, litigation, chemical compliance and storage, and waste management and shipping, including the transboundary movement of waste.