

Energy Transition in the Construction and Infrastructure Industry

While the impact of the energy transition is being felt across all industries and all economies, the growing importance of decarbonization is particularly apparent in the construction and infrastructure sectors. There are countless ways of categorizing the role of the energy transition in construction and infrastructure, including by looking at the types of energy transition projects under development.

These range from pure energy transition projects such as projects investing in renewable energy production and associated infrastructure; traditional infrastructure projects and assets under development, or in existence, in a decarbonizing world—infrastructure projects and assets employing renewable energy sources, carbon capture mechanisms, and incorporating carbon

neutral supply chains; and repurposing, decommissioning, and removal of end-of-life assets that are no longer viable in the decarbonized economy, including the decommissioning of oil and gas infrastructure or the repurposing as carbon capture and storage ("CCS"). The pace and scope of the energy transition brings with it a range of opportunities and challenges.





In order to achieve global carbon reduction targets, there is a growing acceptance that "business as usual" is not enough. New and emerging technologies will be critical to achieving decarbonization over the short, medium, and long term, including the expansion of renewable energy sources, expansion of CCS to mitigate carbon-heavy sectors, mass scaling of green fuels such as hydrogen and ammonia, uptake of large-scale battery storage, etc. Many of these technologies are still being developed and have not yet been successfully exploited at scale.





Our experience in advising clients on the implementation and use of these kinds of novel technologies ensures our multidisciplinary team of lawyers can provide a deep understanding of the legal issues surrounding the innovative technology required to achieve decarbonization. Our recent experience advising on the legal and commercial issues associated with the deployment of hydrogen and carboncapture technology has reinforced our belief that targeted advice is of paramount importance.

- Advised Chevron U.S.A. Inc. in its receipt, with counterparties Svante, Inc., the Kiewit Group, OTC, and Electricore, of a competitive U.S. Department of Energy National Energy Technology Laboratory grant to advance an innovative carbon capture technology.
- Advised an Australian subsidiary of Yara
 International ASA, in a collaboration with
 ENGIE, to construct and operate a pilot
 renewable hydrogen project in the Pilbara
 area of Western Australia. The project is first of
 a kind in Australia, and one of the world's first
 industrial-scale renewable hydrogen projects.
- TotalEnergies. Advised in buyout of Total Eren's other shareholders, increasing its stake from close to 30% to 100% after a successful strategic alliance of five years. Total Eren is a renewable energy global player with a 3.5 GW renewables production and a 10 GW pipeline as well as a pioneer in green hydrogen. The acquisition of 70.8% represents a net investment of around €1.5 billion for TotalEnergies.
- Advised CDPQ on its participation in the record €200 million investment in green hydrogen pioneer Hy2gen AG, the world's largest private investment in green hydrogen to date.
- Advising an affiliate of Koch Industries,
 Inc., in the \$3.6 billion acquisition of lowa
 Fertilizer Company ("IFCO") from OCI N.V., a
 Netherlands-based producer and distributor of hydrogen products.



As national governments commit to ambitious net zero targets, the policy and regulatory landscape is shifting toward incentivizing decarbonization (and disincentivizing high-carbon projects). This includes the emergence of national and global carbon trading schemes, related tax relief and subsidies for green projects, and other enforceable targets to compel emission reductions. Increasingly, a company's "social license" is also premised on its commitment to decarbonization, necessitating the investment in carbon neutral infrastructure. The carbon credentials of an infrastructure project are now a key funding and investment criteria.

Increasingly, securing capital investment and/or concessional grants is directly tied to a project proponent establishing a project's capacity to satisfy carbon reduction and other ESG objectives. However, this rise of green capital raises questions about traditional project financing in a rapidly changing environment characterized by novel technologies and evolving market dynamics.

Despite this groundswell toward green, it can still be questioned whether policy is leading industry or vice versa in the energy transition, with the consequence that we are often asked to advise on investment and operational decisions being made "ahead of the curve" of a fully established or entrenched regulatory framework. Ultimately, regulatory risks are commercial risks, and we are frequently instructed to assist our clients navigate these complex and ever-changing regulatory frameworks efficiently, and effectively, so that our clients can focus on their core business priorities.



Our clients across multiple industries are some of the first to navigate these alternative funding models and market innovations directly tied to green performance. As these models gather pace, and affect more and more corporate players, experienced advisers become essential.

- Acted for an Australian government entity
 in assessing the \$11 billion sun cable solar
 project for its key infrastructure requirements
 including transmission lines. Advised on
 the renewable electricity certificates and
 availability of carbon credits along with green
 energy offtake arrangements.
- Advised Proctor & Gamble in entering into a 10-year virtual power purchase agreement ("VPPA") with a subsidiary of renewable energy developer Renewable Power Capital ("RPC") for a wind energy project in Sweden with an expected capacity of 140 MW. The VPPA will help RPC finance the development of the wind energy project, and the project is expected to enable P&G to offset carbon emissions associated with its EU electricity consumption to further P&G's efforts to meet its sustainability goals.
- Advised a renewable energy company on a power station renewable energy scheme target liability, clean energy scheme impacts, and revisions of Power Pooling and gentrader arrangements for the 1680 MW power station.
- Provided complex regulatory advice to a retail company on embedded networks, renewable energy generation at multiple sites, electricity retailing, and electricity bulk purchasing arrangements. Advising on large-scale renewable energy purchase arrangements including specific retail renewable purchase sleeving agreements.
- Advising a leading multinational bank on the legal aspects and risks of the CBL carbon markets platform, which operates globally as a platform across multiple registries that include voluntary and mandatory carbon markets among other functions.



In addition to regulatory and policy obligations, novel private contracting models and risk allocation regimes will need to take shape to address the complexities of achieving and ensuring decarbonization. In our experience, express carbon reporting obligations are becoming increasingly prevalent in infrastructure and construction contractual frameworks, including requirements relating to the use of carbon neutral supply chains.





Our lawyers have a deep understanding of the legal and commercial risks our clients confront in this rapidly evolving landscape. We are eminently placed to help our clients manage and mitigate those risks through novel risk allocations, including the adoption of joint venture structures clearly demarcating risk and responsibility. Anticipating and mitigating novel risk between corporate collaboratives requires lawyers who deeply understand the industry, its operatives, and their risk exposure. Jones Day has this offering globally.

- Advised Marathon Petroleum Corp. in the formation of a joint venture with Neste to convert Marathon's idled refinery in Martinez, California, into a 730-million gallons-per-year renewable fuels facility. The multi-year project is structured as a 50/50 joint venture with Neste expected to contribute a total of \$1 billion, inclusive of half of the total projected project development costs through the completion of the project.
- Advised Orano in the context of the setting-up of two joint ventures dedicated to the production of critical materials for batteries for electric vehicles, together with Chinese group XTC New Energy. Under the terms of the agreements, Orano and XTC New Energy will combine their expertise to set up two production plants on a single industrial site in Dunkirk, in France's Hauts-de-France region.
- Advised an integrated energy company
 operating in Europe in connection with the
 conversion of a refinery into a zero-crude
 platform, including the creation of joint
 ventures in carbon neutral energies with one
 of the leading suppliers of biodiesel in Europe
 to build a biojet production plant primarily
 producing for the aviation industry, as well
 as the creation of a joint venture to build a
 plastics waste conversion facility.
- Advising a mining company on its waste coal methane extraction and trials for the use of that gas as an alternative fuel energy source in large mine transport.



At its heart, an energy transition infrastructure project is still an infrastructure project like any other. The usual range of risks and disputes will invariably arise, including delays, cost overruns, and defects—although the scope, complexity, and frequency of these disputes may be amplified given the inherent uncertainty and pace of change of the energy transition.



Our lawyers have an extraordinary amount of experience advising on project risk, and on disputes when they arise. We are seeing our clients face many of the same issues presented by green-energy projects as traditional project disputes, but we are also seeing novel issues unique to clean energy. Expert advice remains critical during these high-stakes junctures, which Jones Day lawyers are well placed to provide. Our lawyers have acted in adversarial proceedings concerning green-energy projects of international significance.

- Advised Veolia in connection with proceedings arising out of a large construction project at Port Worlsey in Australia concerning delay and disruption claims under an EPC contract.
- Representation of a Japanese energy company, as EPC contractor, in connection with various disputes arising under three EPC contracts relating to solar projects in Aomori Prefecture, Hyogo Prefecture, and Hiroshima Prefecture.
- Advising an energy company in respect of a dispute in relation to a connection and access agreement and regulatory compliance for steps to connect a solar farm.
- Advised a wind energy company in a dispute regarding a dispute flowing from a cancelled off-shore wind project off the coast of New Jersey.
- Represented a solar company in a dispute with an EPC contractor regarding the construction of a solar farm in Wharton County, Texas.
- Acted for a large energy company and certain of its subsidiaries in a shareholder derivative action arising from the acquisition of the commercial and industrial solar business from a residential solar company.



Jeff Schlegel
Practice Leader
Houston
+1.832.239.3728
jaschlegel@jonesday.com



Practice Leader Chicago +1.312.269.4334 brianlsedlak@jonesday.com

Brian Sedlak



Practice Leader London +44.20.7039.5237 virani@jonesday.com

Vica Irani



Julian Bailey
London
+44.20.7039.5460
julianbailey@jonesday.com



Simon Bellas

Perth
+61.3.9101.6871
sbellas@jonesday.com



Audrey Bontemps
Paris
+33.1.56.59.39.28
abontemps@jonesday.com



Brussels +32.2.645.14.80 fbrughmans@jonesday.com

Ferdinand Brughmans



Antonio Canales

Madrid
+34.91.520.3939
acanales@jonesday.com



Dickson Chin

New York
+1.212.326.7893
dchin@jonesday.com



John Cooper
Brisbane/Sydney
+61.7.3085.7010/+61.2.8272.0718
johncooper@jonesday.com



New York +1.212.326.3647 Idany@jonesday.com

Pierre Heitzmann

Katie Mead



Ashley Gullett
Columbus
+1.614.281.3980
agullett@jonesday.com



Jean Pierre Harb
Paris
+33.1.56.59.39.39
jpharb@jonesday.com

Dan McMillan



Dubai/Paris +971.4.709.8414/+33.1.56.59.39.39 pheitzmann@jonesday.com



Amy Kläsener
Frankfurt
+49.69.9726.3939
aklaesener@jonesday.com



Los Angeles +1.213.243.2582 ddmcmillan@jonesday.com



Perth +61.8.6214.5722 kmead@jonesday.com



James Pickavance
London
+44.20.7039.5492
jpickavance@jonesday.com



Roy Powell

Dallas/Pittsburgh
+1.214.969.3618/+1.412.394.7922
rapowell@jonesday.com



Kit Rockhill

Houston
+1.832.239.3836
krockhill@jonesday.com



Stefan Schneider

Munich
+49.89.20.60.42.200
sschneider@jonesday.com



Zac Sharpe
Singapore
+65.6233.5506
zsharpe@jonesday.com



Annabel Treadgold
London
+44.20.7039.5214
atreadgold@jonesday.com



Carolyn Woodson

Los Angeles
+1.213.243.2558
cawoodson@jonesday.com

ONE FIRM WORLDWIDE®

AMSTERDAM	CLEVELAND
ATLANTA	COLUMBUS
BEIJING	DALLAS
BOSTON	DETROIT
BRISBANE	DUBAI
BRUSSELS	DÜSSELDORF
CHICAGO	FRANKFURT

HONG KONG HOUSTON IRVINE LONDON LOS ANGELES MADRID MELBOURNE

MEXICO CITY MIAMI MILAN MINNEAPOLIS MUNICH NEW YORK PARIS PERTH
PITTSBURGH
SAN DIEGO
SAN FRANCISCO
SÃO PAULO
SHANGHAI
SILICON VALLEY

SINGAPORE SYDNEY TAIPEI TOKYO WASHINGTON