

Clean and Renewable Energy - Fuels

Expanding Clean and Renewable Fuels Production

From the early 1970s to the present, before oil embargoes and other energy security concerns, oil price increases, climate change and other environmental issues spurred the surge of interest in clean and renewable fuels, Andrews Kurth lawyers were leading the development and expansion of biofuels production and the overall clean and renewable energy industries. Since the inception of clean and renewable energy production, we have addressed virtually every domestic and international issue faced by clean and renewable fuels producers and related companies. Today, we represent clients in the development, finance, construction, operation and maintenance of clean and renewable fuels manufacturing facilities, including advice on all state and federal regulatory compliance and funding programs, credit and incentive enhancements and emissions-related matters. We also assist investors in making biofuels and other clean fuels investment choices.

Corporate Finance and Structuring

Andrews Kurth has been involved as biofuels and other clean-fuels financing has progressed from single-unit facilities sponsored by co-ops or smaller developers, to larger manufacturing facilities and biorefineries made possible by complex project financings arranged by substantial, experienced developers, investment funds and Wall Street bankers. We represent marketers, blenders and related companies seeking to profit from the utilization of industry logistics and investors seeking to build capacity by acquiring assets and/or companies through the consolidation of ethanol, biodiesel and other clean fuels industries.

We combine deep experience in finance with our knowledge of conventional and renewable energy industries to advise developers, lenders and related companies in multiple project teams with respect to the development of complex contracts and sophisticated capital structures, domestically and internationally. We also assist clients by providing all of the necessary corporate, tax and intellectual property guidance. We additionally introduce clients into specific investment opportunities and connect them with debt and equity financiers.

Technical Innovation

Technological change is a key driver for consumers in the acceptance of biofuels as a sustainable, cost-competitive option. Our knowledge of clean and renewable fuels technology is extensive and includes experience with:

- Ethanol (sugar, grain and cellulosic)
- Biodiesel (derived from a variety of virgin oils, plants and animal matter, wastes, greases and other biomass feedstocks)
- Clean fuels (coal-to-liquids, biomass-to-liquids using bio-oils and other biomass through biorefining processes such as Fischer-Tropsch renewable diesel and renewable dimethyl ethers (DMEs))

For example, our team currently advises fuel manufacturers in cutting-edge technologies including, but not limited to, fermentation of fuel ethanol using advanced yeast technologies and genetically enhanced feedstocks, production of biodiesel from advanced hydrogenation and esterification technologies using multiple feedstocks, cellulosic acid hydrolysis, Fischer-Tropsch gasification processes, depolymerization of oils in refinery units, and utilization of power plant flue gas and other waste products for the production of algae for conversion into biofuels.

We also advise clients seeking to reengineer and expand biofuels and other clean fuels manufacturing facilities in ways that reduce their energy and other feedback costs.

Environmental Compliance

Our team has been involved in a wide variety of emissions issues commencing domestically with the enactment of the US Clean Air Act through the application internationally of the Kyoto Protocol. With respect to the clean and renewable fuels industries, these emissions include, but are not limited to, lead NOx, SOx, Carbon Dioxide, and other compliance requirements. Andrews Kurth's experience in environmental compliance for clean and renewable fuels companies includes such issues as federal and state permitting for manufacturing facility construction, adherence to reformulated gasoline

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production standards, compliance domestically with federal renewable fuels standards (RFS) and state renewable portfolio standards (RPS), and compliance internationally with carbon offset requirements. In this regard, we assist companies in the certification and trading of credits on various emissions trading exchanges worldwide and in the sales of emissions credits to purchasers such as carbon credit funds, emissions trading brokers and other strategic buyers.

Monetizing Available Renewable Energy Credits

With respect to ethanol, biodiesel, renewable diesel and other clean fuels industries, we assist our clients in the monetization of related credits such as RFS credits, renewable energy certificates (RECs) under state RPS programs, Clean Air Act credits, newly-arising state industrial carbon credits, Kyoto Protocol carbon offsets, federal and state tax credits, state producer incentives and other applicable industry credits.

For example, our lawyers assist clean and renewable fuels clients take advantage of the U.S. Environmental Protection Agency's new rules for implementing the RFS created by the Energy Policy Act of 2005. In this regard, we structure the trading mechanisms that govern how RFS credits are generated, sold, purchased and traded. We assist clients with regulatory compliance as they expand production to meet the current RFS goal of 7.5 billion gallons of renewable fuels blended into gasoline and diesel by 2012 and President Bush's State of the Union Address target proposing an alternate fuels standard (AFS) goal of approximately quintupling the 2012 RFS target to 35 billion gallons of clean and renewable fuels by 2017.

Our regulatory practice is domestic international in scope. For example, we advise clients on the best ways to meet RFS mandates (and new AFS targets), best methods to meet the RPS requirements adopted by approximately 50 percent of U.S. states, best methods to address proposed renewable fuels industry restrictions such as those facing biodiesel producers in Texas and best ways to meet the Kyoto Protocol requirements for Clean Development Mechanism (CDM) and Joint Implementation (JI) programs in specified, qualified countries. Our regulatory and industry guidance is also site specific. For example, we use our substantial energy pipeline experience to provide biofuels producers with the best natural gas access for their production operations, our railroad experience to provide producers with opportunities to address congested railways and marine experience to assist companies in the delivery of feedstocks to manufacturing facilities and clean and renewable fuels and co-products to the ultimate customer through navigable waters.

Practice Breadth

Our team has experience in more than 20 countries. Our work increasingly has taken on a global dimension, given the international growth in biofuels production for both local consumption and/or export. We have worked worldwide on fuel ethanol projects with financial institutions, investment funds, developers, constructors, engineers, trading companies and other related companies. In sum, Andrews Kurth's expanding alternative fuels practice is a logical outgrowth of our 100-year history in the energy business, our early and continuing role in the emerging clean and renewable fuels field, and application of our energy technology capabilities.