

# **Renewable Energy**

With its team of experienced engineering and construction experts, GlassRatner (formerly Interface Consulting) is well positioned to advise clients on renewable energy projects. Government incentives and decreased installation costs have led to utility-scale implementation for renewable technologies in the power and energy sector. While these technologies have unique design considerations, many of the construction challenges are consistent with the dispute issues GlassRatner has assisted clients with for 35 years.

With experience assessing permitting delays, design changes, force majeure events, differing site conditions, contractor terminations, supply chain issues, delayed commissioning, mismanagement, rework, and the associated impacts for such issues, GlassRatner possesses valuable knowledge for analyzing renewable energy project claims and disputes. In addition, GlassRatner has experience developing expert reports and providing expert testimony to support its assessments in litigation, arbitration, or mediation.

### Wind

Innovation and government incentives have allowed wind power generation to approach grid parity. Conversely, innovation has promoted competition within the industry, and uncertainty regarding the renewal of government incentives has impacted project funding; both are among the many challenges wind power continues to face. With increased competition and shrinking profit margins in the wind industry, GlassRatner can advise clients in navigating projects through completion and resolving disputes.

#### **Biofuels**

Ethanol-based biological materials received significant attention as a sustainable fuel source to supplement the power grid. As many of these ethanol and biofuels projects have been completed in recent decades, GlassRatner has experience analyzing the associated construction issues and providing dispute resolution assistance for ethanol plants. Recently, fluctuating corn prices and idled plant capacity are presenting additional challenges to the industry, challenges which GlassRatner is prepared to help clients overcome.

### Hydroelectricity

As many of the viable locations have been occupied, developing new hydroelectric facilities has become increasingly challenging. GlassRatner is familiar with diversion projects and the pumped storage hydropower concept, and is therefore able to aid clients as they continue to explore new options for hydroelectric power production.



## Solar

Photovoltaic energy production has seen industrial applications from utility-scale power plants to equipment-dedicated solar panels with battery backup. As photovoltaic power is increasingly integrated into construction projects, GlassRatner is beginning to assist clients in assessing the associated implications and value.

## **Hydrogen Fuel**

Hydrogen fuel production has acquired recent momentum, particularly blue hydrogen produced by steam reforming of natural gas and green hydrogen produced by wind and solar power via electrolysis. GlassRatner has experience with blue hydrogen generation in numerous industrial applications. As green hydrogen is increasingly pursued as a solution to the intermittent nature of wind and solar energy, GlassRatner is prepared to assist in overcoming new challenges that arise.

## Experience

GlassRatner's renewable energy related experience comprises work on numerous structures and facilities around the world, including:

- Wind Farms
- Diversion Projects
- Water Relocation Pipelines
- Biofuels Facilities

- Solar Powered Equipment & Battery Backup
- Fixed-Bottom Marine Support Structures
- Telecommunications Lines & Cables
- Floating Marine Substructures



