Insuring the Renewable Energy Industry: Growing Opportunities for Brokers
By 2021, the global renewable energy market is expected to reach $226.1 billion. As the alternative or renewable energy industry continues on its growth trajectory, it is experiencing unprecedented change alongside a hardening market – something the insurance industry hasn’t experienced in nearly 20 years.

What this means for insurance professionals, underwriters and carriers is that they will be faced with navigating challenging market conditions while ensuring their clients have a holistic blend of risk management solutions in addition to the more standard general commercial coverages.

In this white paper, we’ll look at the current condition of the renewable energy industry and how insurance brokers can identify key selling opportunities to better serve this ever-expanding market.

The renewable energy market value is forecast to increase from $720 million in 2019 to $5.1 billion by 2024. Driving such growth is an increased focus on adding more renewable energy sources to the nation’s grid.

Source: U.S. Energy Information Administration

Renewables are the fastest-growing energy source, surpassing petroleum and fossil fuels.

**Energy Growth in 2020:**
- Wind – 44%
- Solar – 32%
- Natural Gas – 22%
- Other – 2%

Source: U.S. Energy Information Administration

**RENEWABLE ENERGY NEW REALITIES: INDUSTRY TRENDS, ISSUES AND OUTLOOKS**

To better serve your clients, it’s critical to understand key drivers that are propelling growth and impacting the renewable energy industry today, as well as those on deck in the foreseeable future. Doing so can help you and your clients better address issues and challenges together, and create a proactive, well-rounded risk mitigation program.

The following are industry trends, issues and outlooks to consider when working with your renewable energy clients.
**Competitiveness Enters a New Era**

The flat U.S. electricity load growth, reduction in technology and renewable energy costs, monetization of energy storage, and regulatory changes in federal and state incentive programs have created increased interest in renewable energy resources as the industry competes to replace retiring coal capacity, deteriorating gas and nuclear power plants. This, along with the declining cost of wind, solar and batteries, has made renewable energy sources more affordable. As a result, the competition between renewable and traditional resources, as well as renewables competing against each other, is expected to continue in a growth trajectory as communities and states push toward higher percentages of power coming from renewables.

**Key Renewable Energy Resources in 2020**
- Biomass
- Geothermal
- Hydroelectric
- Wind (onshore and offshore)
- Solar
- Wave and tide energy

**Accelerated Interest in Distributed Energy Resources**

With benefits that include affordability, reliability and reduced network costs, interest in adding distributed energy resources (DERs) into the grid is growing. However, DERs typically have a limited hosting capacity or limited amount of energy resources that can be connected to a distribution network and operate within its technical limits. More homes and businesses increasing their demand for energy storage has prompted the modernization of grids with new technology options that support grid resiliency from the “bottom up” or customer sites. It also has regulators looking at energy storage as a necessary component of the continued integration into the energy market to sustain the future of the grid. This growing interest in energy storage is set to gain momentum in 2020 and beyond as part of an increasing push to expand technology in the system.

**Greater Emphasis on Claims Management**

The frequency and severity of insurance claims in the U.S. renewable energy industry have significantly increased over the past five years, meaning insurers and asset owners must reset their benchmarks for renewable energy risks. With carriers looking to improve their bottom lines, you should expect an increased interest in claims management, including efforts to identify the root causes of issues and exploring subrogation possibilities whenever feasible. As a result, it will become increasingly important to work with clients on the development of a risk management program, as mitigation efforts can help reduce losses paid and impact – key elements in calculating premiums.

The claims burst in renewable energy can be attributed to a number of key issues that include:
- Material damage during construction due to pressure to build projects in shorter time frames and more efficiently.
- Component/equipment failure and damage due to mechanical and electrical breakdown.
- Extreme weather risks based on climate change.
- Diminished Online Energy Manager warranties due to increased losses and financial pressure.

Source: David Weston, “Offshore wind and batteries LCOE falling sharply,” March 2019.8
Continued Growth in Wind and Solar
Short-term solar and wind energy growth is expected to increase in 2020, with nearly 96.6% of net new generation capacity additions coming from these two resources. As several states increase their renewable portfolio standards, the industry will likely see the demand hit new levels, with some utilities announcing 100% of their decarbonization goals. To continue boosting wind energy efficiencies, the industry is looking to add large turbines (including floating, offshore turbines), taller towers and longer cables. In addition, the wind industry is looking to add an estimated 43,000 new jobs by 2030.¹

INDUSTRY CHALLENGES

The COVID-19 Pandemic
2020 was right on target to become a record-setting year for renewable energy power. Since the onset of the COVID-19 pandemic, only 167 gigawatts of renewable energy capacity are projected to be added by the end of 2020 – a 13% drop compared to the increase in 2019 and the first decline in growth rate in 20 years, according to a report by the International Energy Agency (IEA).² In its report, the IEA states that the decline can be attributed in part to the delays in construction activity due to supply chain disruption, stay-at-home mandates, social distancing guidelines, massive job losses in the clean energy sector and emerging financial challenges. However, the IEA praises the industry for its resiliency and forecasts that by 2021 renewable power additions will most likely recover back to 2019 levels, but may still be 10% lower than prior to the COVID-19 pandemic. Today, supply chain disruption and delays in project construction are having a direct impact on the commissioning of renewable electricity projects, biofuel facilities and renewable heat investments.

Cybersecurity and Fraud Issues
Cybersecurity and digital fraud have become two of the most important concerns in the renewable energy sector. In fact, the lucrative nature of the renewable energy industry makes it one of the most targeted sectors for cybercriminals and digital fraud perpetrators. According to a report by Deloitte,³ public and private entities are reporting to have experienced severe losses associated with cyberattacks and digital fraud in the past year. Often including supply chain attacks, these losses typically result in financial theft, operational disruption, reputational damage, and have a big impact on critical infrastructure as well as regulatory consequences. As the sector continues to embrace and expand its digitization and industrial internet of things, cybercriminals will find growing opportunities as the industry evolves, with risks being attributed to unsecured and heavily automated endpoints. Cybersecurity risks can’t be completely eliminated. Therefore, they must be managed through informed decision-making processes and proper risk transfer products that include insurance. In response, companies must prioritize cybersecurity.

Climate-Related Risks
Climate change presents increasing challenges for renewable energy production and transmission as a result of temperature increases, extreme weather events and changing precipitation patterns. In fact, with growing implications relating to the vulnerability, reliability and performance of the energy system, the physical impacts of climate change are among the top challenges that the renewable energy industry will face over the next several years. According to a report published by Swiss Re, these challenges will lead to rising losses and greater uncertainty in the assessment of climate-related events by the insurance industry, which could make certain weather risks uninsurable.

Currently at the top of the climate-related risk list in renewable energy are hydropower and solar. Hydropower energy continues to battle growth threats relating to changes in rainfall patterns, flooding/intense rainfall and air temperatures, as well as threats that include landslides, intensity/frequency of storms, and conflicts with agriculture and irrigation. These changes in regional weather patterns significantly threaten the hydrologic cycle that is the primary source of energy.
Renewable energy is projected to make up the largest share of total global energy supply by 2050. However, the accelerated renewable energy market being driven by climate change is exposing itself to new risks, particularly within certain subsectors such as floating offshore wind and hybrid renewable energy.

Source: Willis Towers Watson

support of hydropower energy. For solar, growing cloud-cover events in some regions have drastically affected the use of solar technologies, while the increase and severity of storms continue to cause considerable damage to equipment. The supply of fossil fuels and thermal generation and transmission will also be affected by climate change.

The Hardening Insurance Market

In recent years, the renewable energy insurance market has developed within a softening overall property market environment, offering clients inexpensive, broad coverage with high limits and low deductibles. Today, however, many insurers will no longer support these terms. Currently, the renewable energy insurance market finds itself up against rapidly declining loss ratios and increased costs as hard-market conditions come to pass.

Unlike soft-market conditions, a hardening insurance market is more restrictive when it comes to underwriting and has tighter policy conditions and reduced writing capacity. As the shift from a buyer’s to a seller’s market ensues, the renewable energy insurance market is likely to tighten capacity efforts and policy conditions. Changes may include substantial shifts in deductibles and pricing and less broad policy language as carriers scale back on flexible, open-ended terms and conditions. This will also include exclusionary language and forms being added to insurance contracts.

Brewing Geopolitical Storm Clouds

The renewable energy industry has always grappled with conflicts, threats and other international tensions. Today, geopolitical concerns not only affect renewable energy companies, but if the government decides to cut renewable incentives, it could impact a developer’s pre-agreed investment and result in losses. Currently, the U.S. Department of Energy has some of the broadest responsibilities in regulating power generation and electric transmission, distribution and retailing across the country. With numerous legal bodies overseeing nuclear, electric, gas, coal, oil, petroleum and more, it’s critical for businesses in the energy industry to understand how local, state and federal jurisdictions are changing in order to remain in compliance with laws.

After years of unsustainably soft conditions and losses, pricing for onshore wind projects have firmed and insurance deductibles are rising.

Today, typical onshore wind project deductibles are $250,000 for physical damage and 30 days for business interruption. Wind rates now range from $0.20 to $0.30 before natural catastrophe loading.

Source: Willis Towers Watson

ENERGY INSURANCE COVERAGE CONSIDERATIONS

Today’s insurance market plays an integral role in supporting the development and implementation of renewable energy projects at various stages. And while historically, insurers have been able to look back and analyze data to best determine the likelihood of risk events occurring in the future, the renewable energy industry is under such rapid development that risk management can be a challenge.
In addition to basic commercial coverage, the following are energy-specific insurance solutions and opportunities for creating a more holistic risk management program for your clients:

- Pollution coverage to protect from losses caused by hidden or unanticipated pollution conditions.
- Technical risk damage caused by operator error or by manufacturer, losses caused by the operation of the equipment, damage caused by frost and ice, and financial losses caused by the interruption of the operation of machinery or electronic equipment.
- Coverage for mobile and newly acquired equipment.
- Business income, contingent business income and extra expense to cover financial losses that result from the interruption or limitation of a company’s operations and the related property losses.
- Cyber insurance to safeguard against data breaches and other cyber exposures.
- Upstream energy coverage for land-based oil and gas nonoperators with working interest in producing wells.

**SELLING OPPORTUNITIES IN A COMPETITIVE MARKET**

The following are ways for you to best approach clients and prospects with insurance products in a challenging and competitive renewable energy market:

- Get involved at the design stage. Providing guidance on the risks and insurance implications that a specific project may have can be invaluable. This is especially critical during the design and development stage of a project and can include knowing what fire and flood protections are in place as well as the appropriate security standards.
- Develop a detailed risk management proposal of coverage. A proposal of coverage that is unique to your clients’ operations presents a more holistic risk management program as well as an opportunity to upsell policies with needed coverage.
- Conduct a policy review of all accounts. With so many changes going on in the industry, it’s critical to take the time to review existing accounts – particularly at renewal – for potential gaps in coverage.

- Educate your clients on cyber risk mitigation. More than 84% of renewable energy survey participants expressed concerns that the industry isn’t clear on how they should manage their cybersecurity risks. This can be an opportunity to inform your clients on the importance of risk transfer with a cyber insurance policy.
- Work with a wholesaler that is a renewable industry expert. Insurance wholesalers that understand the market and are renewable energy specialists are at the forefront of the latest developments in the sector. From solar photovoltaic plants to offshore wind projects, new territories and long-established power grids, working with experts can help successfully guide you and your clients to and through this evolving risk landscape.

**CONCLUSION**

The risks facing the renewable energy industry are wide ranging and ever changing. As issues such as climate change, geopolitical risk and cybersecurity continue to create uncertainty and remain at the top of boardroom agendas, the rapid innovations in technology present both threats and opportunities.

Today, it is essential that businesses in the renewable energy industry prepare themselves for the turbulence that disruptive change inevitably brings in challenging times. As an insurance professional, it’s important to partner with your clients and educate them on new and emerging developments as well as provide the most appropriate risk advisory, risk transfer and retention solutions based on their individual needs.
ABOUT WORLDWIDE FACILITIES, LLC.

At Worldwide Facilities, we’re experts in renewable energy. From solar to wind, biomass to geothermal, we have the market reach and comprehensive risk management programs to serve virtually every sector of the energy industry.

To learn more, please contact an Energy Specialist.

JOSE AVILA
Vice President, Broker
(619) 814-2497
javila@wwfi.com

ANTHONY DORN
Assistant Vice President, Broker
(619) 814-2498
adorn@wwfi.com

LOREN HENRY
Broker
(619) 541-4265
lhenry@wwfi.com

GRANT KANAMORI
Broker
(619) 814-2488
gkanamori@wwfi.com

NOTES
1. Smart Electric Power Alliance, Utility Carbon Reduction Tracker.
5. U.S. Energy Information Administration.
7. Willis Towers Watson.
Established in 1970, Worldwide Facilities is a national wholesale insurance broker, managing general agent, and program underwriter. Our team of insurance specialists has access to virtually every specialty domestic and international insurance market.

HEADQUARTERS
725 S. Figuroa Street, 19th Floor
Los Angeles, CA 90014
(213) 236-4500

Visit wwwfi.com for a full list of offices around the country