



I. CONTINUING GROWTH IN RENEWABLE ENERGY

The global renewable energy sector has witnessed tremendous resilience and growth during the Covid-19 pandemic. Renewable energy capacity achieved over 2,500 GW globally and is forecasted to increase by an additional 200 GW, driven by further growth in China, the United States and Europe. The sector is forecasted to grow by 8.8% or approximately 220 GW in 2021 as projects are completed. As costs of producing renewable energy continue to decline and supportive governmental policies are enacted, demand for renewable energy will grow.

The total number of global M&A transactions in renewables is forecasted to increase by 4.6% to 968 transactions for 2020. Total transaction value however is forecasted to decline by 44.5% to \$34.4bn. The sub-sectors with the highest M&A activity in 2020 are the solar and wind sectors. Through November 2020, approximately 74% of all M&A transactions were from solar (50%) and wind sectors (24%).

The geographic regions with the highest volume of transactions are Europe (41%), Asia/Pacific region (30%) and North America (19%). Currently, renewable energy produces 40% of Europe's electricity and is forecasted to reach 60% by 2030. Approximately 42% of the renewables transactions in Europe were solar and 35% were wind. By contrast, in North America, over 59% of transactions were solar and only 17% were wind. As North America continues to develop its onshore and offshore wind capabilities over the next decade the percentage of wind transactions is anticipated to significantly increase.

Chart I: Global Renewable Energy M&A Transactions 2017-2020

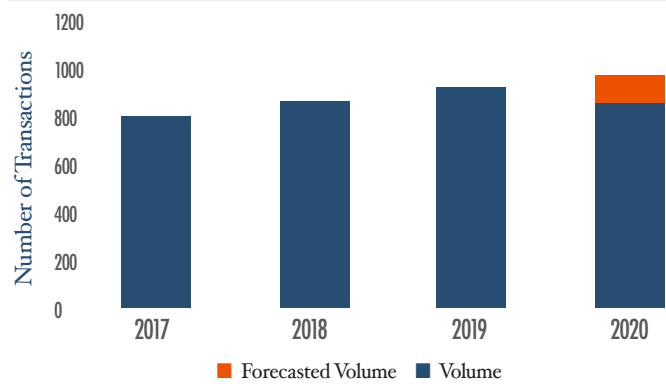


Chart II: 2020 Renewable Global M&A Volume by Sector

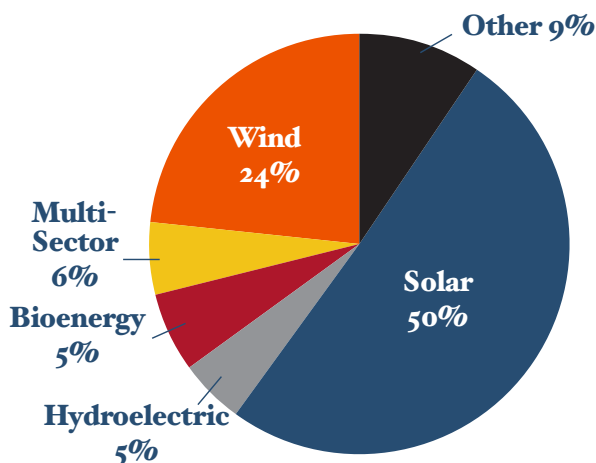
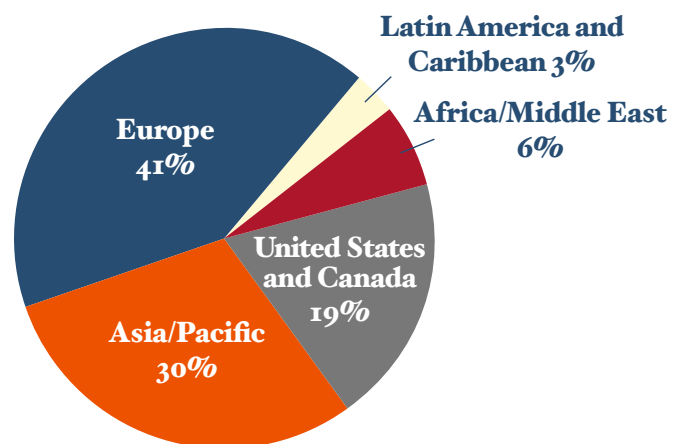


Chart III: 2020 Renewable Global M&A Volume by Region



The 2021 transition to a Democratic Administration in the United States will spur increased activity in the renewable sector. One area of particular focus will be the extension of the Federal Investment Tax Credits (ITC) on commercial and residential solar projects. The ITC was established at 30% for projects commenced in 2019, 26% in 2020, 22% in 2021 and 10% for projects commencing in 2022. Extension of the ITC will provide a boost to the USA solar sector.

We expect continued growth in the renewable M&A market driven by: (i) increasing activity from private equity and infrastructure fund players, (ii) the adoption of creative transaction structures (i.e. joint ventures) (iii) expansion of traditional oil and gas companies into the renewable energy sector.

II. SOLAR M&A INCREASES 21% YOY

The solar sector continues to be an area of buoyant M&A activity. Through November 2020, there were 432 solar M&A transactions reported with \$7.4bn in transaction value, an increase of 21% over the 2019 volume of 358 transactions. Europe continues to be the focus of the solar industry as five of the top ten transactions originated there. The largest reported transaction in 2020 was the €760m acquisition of a 2.9 GW solar portfolio by Galp Energia (ENXTLS:GALP) from CS Actividades de Construcción y Servicios SA (BME:ACS). Galp acquired a 75.01% share of the portfolio for €326m in cash and €434m in assumed debt; ACS will retain the remaining 24.99%.

Table I: Top 10 Largest Solar Transactions 2020

Announcement Date	Target	Buyers/Investors	Transaction Size (\$m)	Country	Closed Date
01/03/2020	Photovoltaic portfolio of ACS Servicios. Comunicaciones y Energía, S.L	Galp Energia, SGPS, S.A. (ENXTLS:GALP)	894.33	Spain	09/15/2020
08/14/2020	572 MW Portfolio of Solar PV Power Plants in Spain of X-ELIO Energy, S.L.	China Three Gorges (Europe) S.A.	677.95	Spain	Pending
02/06/2020	2,148 Mwac Operating Solar Portfolio Across 11 States in India	Total Gas & Power Business Services SAS	510.0	India	04/07/2020
11/10/2020	Matsusaka Solar Power Plant	Enex Infrastructure Investment Corporation - Infrastructure Fund (TSE:9286); Enex Asset Management Co., Ltd.	382.2	Japan	Pending
08/06/2020	Two Solar Projects Of ACME Solar Holdings Limited	Actis Asesoría Inversión	334.0	India	08/06/2020
07/14/2020	Solana Solar Plant in Arizona	Atlantica Sustainable Infrastructure plc (NasdaqGS:AY)	290.0	United States	08/17/2020
01/28/2020	300 MW photovoltaic project of Forestalia	Bruc Iberia Energy Investment Partners SL	286.22	Spain	01/24/2020
09/02/2020	306 MW Solar Portfolio of RattanIndia Power Limited	Global Infrastructure Management, LLC	227.82	India	09/02/2020
11/20/2020	Ence Energia Solar S.L.	Q-Energy Private Equity, S.G.E.I.C., S.A	199.24	Spain	Pending
03/31/2020	Solar Photovoltaic Portfolio in Portugal	Finerge SA	145.05	Portugal	Pending



The second largest transaction in the solar sector was the August 2020 announced acquisition of the 0.5 GW portfolio of solar PV plants in Spain by China Three Gorges (Europe) S.A. from X-Elio Energy. The acquisition expands CTGE's presence in Europe in addition to its investments in Portugal, Germany, UK and Poland. The transaction is pending regulatory approval and is expected to close by the end of 2020.

The region with the second largest number of transactions in the top ten is the Asia Pacific region with four of the top ten transactions. The largest transaction was the \$510m acquisition by Total Gas & Power Services SAS with the purchase of 50% of Adani Green Energy Ltd.'s solar portfolio. The 2.1 GW portfolio is diversified across 11 states in India and will be operated as a joint venture. Other notable transactions in the Asia Pacific region included Enx Infrastructure's \$382.2m acquisition of the Matsusaka Solar Power plant in Japan (November 2020), Actis Assesoria Investimento's \$334.0m acquisition of two solar farms from ACME Solar Holding Ltd (August 2020) with 400 MW of energy capacity and Global Infrastructure Partners' (September 2020) \$227.8m acquisition of 306 MW Solar Portfolio from RattanIndia Power Limited. The 306 MW portfolio includes utility-scale projects totaling 297 megawatts and 9 megawatts of rooftop solar power projects and has long-term power purchase agreements signed with government-owned companies.

The largest North American transaction announced in 2020 was the \$290m acquisition of the Solana Solar Plant in Arizona by Atlantica Sustainable Infrastructure plc (NasdaqGS:AY) from tax equity investor Qurate Retail, Inc. (NasdaqGS:QRTE.A). The consideration includes a performance based earn-out linked to the average annual net production of the asset for four future calendar years.

III. WIND POWER SUSTAINS FURTHER GROWTH

The offshore and onshore wind sectors have recorded tremendous growth in 2020. Of the top ten transactions by size, three were offshore wind transactions, and the remaining seven were onshore wind farms and developments. The largest announced wind transaction of 2020 is the November £648m acquisition of the offshore Humber Gateway Wind Farm (United Kingdom) from RWE Aktiengesellschaft (XTRA:RWE). Greencoat Capital LLP acquired a 49% stake in the wind farm. Two additional acquisitions from the top ten list were announced by Greencoat Capital LLP. In September 2020, Greencoat acquired a 25.1% stake in Walney (UK) Offshore Windfarms Limited from SSE for £350m. In April 2020 Greencoat also announced that it would acquire the South Kyle Wind Farm Limited (onshore) from Vattenfall for £320m. The 50-turbine facility will have a 240MW capacity once completed and will be Greencoat's 12th wind farm in Scotland. European transactions account for seven of the top ten acquisitions in 2020, with transactions announced in the UK, Germany, Spain, Norway and Sweden.

The largest North American transaction in 2020 is the announced \$345m acquisition of the 250-MW Blooming Grove Wind Farm of Invenergy LLC by WEC Energy Group, Inc. (NYSE:WEC). WEC Energy group will acquire 80% ownership in the wind farm, that will include long-term offtake agreements with affiliates of two investment grade multinational companies.

Wind power generation in the Nordic sector has seen tremendous growth over the past decade. Two of the top ten transaction in 2020 were originated in Norway and Sweden. In July 2020, Aker ASA announced the \$258m acquisition of wind developer NBT AS to boost their new renewable energy group, called Aker Horizons. Aker ASA announced several initiatives in 2020 to pivot from oil and gas sector to renewable energy. In June 2020, Credit Suisse Energy Infrastructure Partners announced a €200m 85% acquisition of the 252.7 MW Markbygden Phase II wind farm project in Sweden from Enercon GmbH. The 63-turbine wind farm will be installed in the municipality of Pitea in the northern province of Norrbotten. Construction is slated to begin in the third quarter of 2021.

Table II: Top 10 Largest Wind Transactions 2020

Announcement Date	Target	Buyers/Investors	Transaction Size (\$m)	Country	Closed Date
11/23/2020	Humber Gateway Wind Farm	Greencoat Capital LLP; Greencoat UK Wind PLC (LSE:UKW)	861.18	United Kingdom	Pending
07/07/2020	Borkum Riffgrund 2	Gulf International Holding Pte. Ltd.	630.37	Germany	09/24/2020
08/10/2020	Wind Farms in Spain	Finerge SA	501.12	Spain	Pending
09/01/2020	Walney (UK) Offshore Windfarms Limited	Greencoat Capital LLP; Greencoat UK Wind PLC (LSE:UKW)	469.98	United Kingdom	09/02/2020
04/27/2020	South Kyle Wind Farm Limited	Greencoat Capital LLP; Greencoat UK Wind PLC (LSE:UKW)	397.48	United Kingdom	Pending
01/27/2020	250-MW Blooming Grove Wind Farm of Invenergy LLC	WEC Energy Group, Inc. (NYSE:WEC)	345.0	United States	Pending
07/30/2020	Santa Vitória do Palmar Holding S.A.	Omega Geração S.A. (BOVESPA:OMGE3)	280.85	Brazil	11/30/2020
07/17/2020	NBT AS	Aker ASA (OB:AKER)	257.96	Norway	Pending
07/28/2020	Tatanka Ridge Wind Farm	WEC Energy Group, Inc. (NYSE:WEC)	235.0	United States	Pending
06/03/2020	253 MW Markbygden 2 Wind Farm in Sweden	Credit Suisse Energy Infrastructure Partners AG	224.62	Sweden	05/29/2020

IV. CONCLUSIONS

We believe that 2021 will witness continuing growth in renewables transactions which will span the next several decades. As governmental policies continue to stabilize and technology advancement drives down renewable energy prices, global demand for renewable energy continues to rise. This momentum is anticipated to continue in the M&A energy market in 2021.

Increase in Transaction Size: Our research shows the average transaction size is growing to approximately \$97.3m for wind acquisitions and \$44.6m for solar acquisitions. As transaction size continues to grow, there is further rationale and support for institutional partnerships and joint ventures.

Financial Sponsor Investment: Renewable energy projects increasingly are becoming targets for financial sponsors, including pension funds, infrastructure asset management firms and private equity funds. Several leading funds closed in 2020 that invest in the renewable energy sector including Brookfield Infrastructure Fund IV (\$20.0bn), Antin Infrastructure Fund IV (€6.5bn), BlackRock Global Energy and Power Infrastructure Fund III (\$5.10bn) and DIF Infrastructure VI (\$3.5bn).

Joint Ventures for Future Development: Increasingly renewable energy developers are partnering with financial investors to provide further capital, industry experience and financing resources. Several notable joint ventures that were announced in 2020 include the Norwegian private equity group HitecVision and Italy's Eni



who have formed a joint venture to develop renewable energy in the Nordic region, Solar Producer Sonnedix partnership with Amundi Energy Vertes to invest in the European solar PV market and Palladium Energy's joint venture with Inverdale Energy Partners to develop 500 MW of solar and storage projects across the United States.

Corporate Investment in Renewable Energy: Further competition from private equity buyers, strategic corporations (including traditional oil and gas companies), technology companies (such as Google, Facebook and Amazon) and utility companies will drive more demand and competition for renewable projects. Companies of scale including Orsted, Iberdola, Siemens AG and Vestas continue to invest in renewable energy platforms across the renewable energy sector driving growth globally.

Geographic Forecasts:

North America: The renewable energy sector will be a priority focus of United States public policy in 2021. It is anticipated that the United States will rejoin the Paris Climate Agreement, push for extended solar Investment Tax Credits and further investment in the offshore wind sector. With the control of the U.S. Senate awaiting results from the January runoff elections in Georgia, it is unclear if the Democratic Party will have a majority in both the Senate and the House of Representatives. Even with a split government, a number of renewable energy policies should garner bi-partisan support.

Europe: Renewable energy will continue to be the epicentre of European Energy policy. European targets include cutting greenhouse gas emissions by 55% by 2030 and 80-95% by 2050 below 1990 levels. This will drive growth in the offshore wind sector. The EU will target growth in power generation from 12 GW to 300GW by 2050. It is estimated that €800bn of investment will be required to reach these offshore wind targets. To reach these emission targets increased investment in solar energy is forecasted. It is estimated that 60% of electricity will need to be produced by solar power to reach 2050 targets. Currently solar energy produces less than 5% of electricity throughout Europe.

Green hydrogen, which uses renewable energy sources (solar, wind or hydroelectric) to produce hydrogen through the electrolysis of water, is forecasted to grow significantly over the next several decades in Europe. The European Union recently unveiled a target goal of 6 GW of electrolyzers installed by 2024 and 40 GW by 2030. Green hydrogen will become an essential tool in the EU's plan to decarbonize by 2050 and a number of large European energy companies have recently announced initiatives in the sector including Shell, Equinor, Enel, EDP, Orsted and others.

Asia/Pacific: Despite a reduction in renewable energy subsidies in Asia, renewable energy growth and expansion continues. It is estimated that an additional 400 GW of wind and solar capacity will be added in Asia over the next five years.



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19th Annual M&A Advisor Awards -2020 Energy Deal of the Year

We are pleased to announce that our industry organization, *M&A Advisor* has distinguished Winchester Capital as the Winner of the 2020 Energy Deal of the Year Award for the cross-border acquisition of Global Marine Group (UK) by J.F. Lehman and Co. This marks the 7th Industry Award received by Winchester Capital since 2015 and the second award in the Energy sector. The *M&A Advisor* is the preeminent M&A industry organization with over 100,000 professional members in 100 countries worldwide. This Award demonstrates Winchester's continuing focus and commitment to research and transaction origination in the energy sector. For further information on the *M&A Advisor* please visit www.maadvisor.com.

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