The Voice for Clean Capitalism
Corporate Knights

The Carbon Clean200: Leading the transition to a clean energy future

February 13, 2020

2020 CLEAN 200

Who are the largest 200 publicly traded companies ranked by green energy revenues in 2020?

Corporate Knights and As You Sow have released our 7th Carbon Clean 200 list of publicly traded companies that are leading the way with solutions for the transition to a clean energy future.

Since our first report was launched in the summer of 2016 a great deal has changed in the world.

Larry Fink, the CEO of the largest investment firm in the world, shook up Wall Street this January stating that we are "on the edge of a fundamental reshaping of finance" with climate change as a defining feature, that "climate risk in investing risk…in the near future – and sooner than most anticipate – there will be a significant reallocation of capital."

In between Fink's letter, Greta Thunberg's call for a radical change acceleration on the pace of climate action took over the agenda at Davos during the World Economic Forum, where a new manifesto proclaimed stakeholder capitalism and ESG define the new economy and Larry Fink was spotted wearing a rare-edition 2 degrees scarf around his neck.

Another inflection point in the popular culture realm occurred during halftime at Superbowl 2020, where the company that once "killed the electric car" purchased a prime advertising slot to showcase their new electric Hummer with LeBron James as the pitchman.

The fundamental story is that march from high carbon energy to clean energy is only quickening driven mainly by economics, risk, and increasingly supported by other social forces from Greta to Pope Francis; from Extinction Rebellion to The European Central Bank.

Investors have awoken to this trend, which helps to account for the anomalous direction of oil prices and oil stock values in 2019. Brent Crude Oil prices rose 28% and WTI oil prices rose 30% last year, while the energy sector placed dead last in the Standard & Poor's 500 index, posting a 7.3% gain, while the index as a whole rose 29% for the year.

Financial markets are driven by two powerful emotions: greed and fear.

As the outgoing governor of the Bank of England, Mark Carney, puts it, "Companies that don't adapt [to the low-carbon economy] – including companies in the financial system – will go bankrupt without question. [But] there will be great fortunes made along this path aligned with what society wants."

To wit: the top five coal companies in the U.S. have all declared bankruptcy since 2016, and Apple is now bigger than all the oil and gas companies on the S&P 500 combined, in large part because they have earned negative returns over the last decade, even after accounting for dividends.

Carbon-intensive companies are suffering because the alternatives are not just cleaner but cheaper. Around two-thirds of the world's population now live in countries in which wind or solar are the lowest-cost ways of generating power. Renewables are now cheaper than coal in two-thirds of the world's countries, according to Bloomberg New Energy Finance. BNP Paribas estimates that oil needs to come down to US$10 a barrel to be competitive with electricity-driven transport. This does not mean fossil fuels are going away tomorrow, but it does kill the growth story and leads to questions about demand assumptions on big oil's economic forecast. For oil investors, the market's realization of this inevitable decline could make the coal horror show look like Mary Poppins.

This increasing speed of the energy transition is part of the reason why investors representing US$12 trillion in assets have made public their divestment from fossil fuels.

Perhaps more telling is that beyond these public declarations, many of the biggest investors in the world are selling off their fossil fuel holdings and loading up on green assets. For example, without any fanfare the C$200 billion Ontario Teachers' Pension Plan has dialed down its fossil-fuel equity holdings to just 1%. On the upside, the C$306 billion Caisse de dépôt et placement du Québec (CDPQ) has grown its green investment book to C$30 billion, earning commercial returns along the way, according to outgoing chief executive Michael Sabia.

While economics are shifting in favor of clean energy investing, so is public sentiment. Call it the Greta effect if you like, but most people are no longer comfortable with the idea that their retirement investments may be helping to set the world on fire and we are seeing this especially in millennials and women.

Andreas Utermann, chief executive of Allianz Global Investors, which manages US$600 billion, says, "Clients have changed their tune. They have said we need to take this more seriously, and that has sharpened the minds of asset managers."

With all this action, we hope that the Clean200 can to do two things:

- provide a useful North star for investors looking to pinpoint the companies leading the way to a clean energy future.
- to dispel the myth that clean investing is about sacrificing returns.

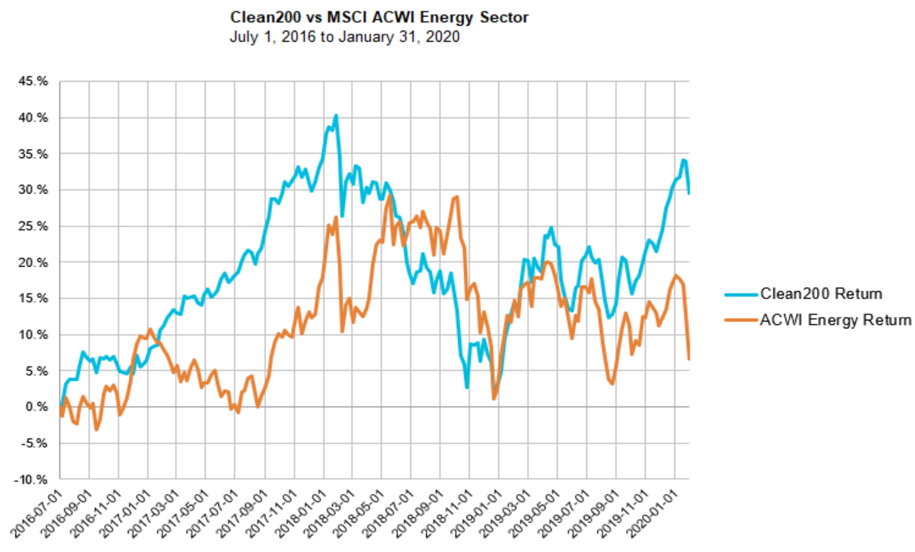
Efficient market theorists caution that if you add any non-financial considerations to portfolio selection, you are at a financial disadvantage. The trouble with this theory is that investing in a time of transition is like hitting a curveball. Putting on a clean energy lens gives the batter a better sense of the ball's trajectory and increases the chance of making solid contact.

To make things easier, *Corporate Knights* and *As You Sow* are proud to present the latest edition of the Clean200.

While we're not promising any home runs, we are happy to report that the Clean200 now has more than a three-year track record of outperforming its high-carbon global counterparts.

Clean 200 returns

Since inception (July 1, 2016), the Clean200 has generally been ahead of the MSCI ACWI Energy Index.



Source: S&P IQ Capital, Corporate Knights

Overall, the model presented in the form of the Clean200 continues to indicate that demand and market forces are driving growth for low carbon companies. Since its inception two and a half years ago, the Clean200 has generally outperformed the MSCI ACWI Energy Index. It will be interesting to see how the trends unfold over the next few months.

The Clean200 list

Rank	Company	Sector	Country
1	Taiwan Semiconductor Manufacturing Co	Information Technology	Taiwan
2	Alphabet Inc	Communication Services	United States
3	Siemens AG	Industrials	Germany
4	Toyota Motor Corp	Consumer Discretionary	Japan
5	HP Inc	Information Technology	United States
6	Iberdrola SA	Utilities	Spain
7	Cisco Systems Inc	Information Technology	United States
8	Tesla Inc	Consumer Discretionary	United States
9	Schneider Electric SE	Industrials	France
10	Unilever PLC	Consumer Staples	United Kingdom
11	Lenovo Group Ltd	Information Technology	China
12	Abb Ltd	Industrials	Switzerland
13	Vestas Wind Systems A/S	Industrials	Denmark
14	Umicore SA	Materials	Belgium
15	Valeo SA	Consumer Discretionary	France
16	Intel Corp	Information Technology	United States
17	Banco do Brasil SA	Financials	Brazil
18	Air Liquide SA	Materials	France

Rank	Company	Sector	Country
19	Compagnie de Saint Gobain SA	Industrials	France
20	Companhia Energetica de Minas Gerais CEMIG	Utilities	Brazil
21	Hitachi Ltd	Information Technology	Japan
22	Sanofi SA	Health Care	France
23	Canadian National Railway Co	Industrials	Canada
24	Accenture PLC	Information Technology	Ireland
25	Telefonaktiebolaget LM Ericsson	Information Technology	Sweden
26	Byd Co Ltd	Consumer Discretionary	China
27	Kimberly-Clark Corp	Consumer Staples	United States
28	Kering SA	Consumer Discretionary	France
29	Panasonic Corp	Consumer Discretionary	Japan
30	Alstom SA	Industrials	France
31	Samsung SDI Co Ltd	Information Technology	South Korea
32	Aisin Seiki Co Ltd	Consumer Discretionary	Japan
33	BT Group PLC	Communication Services	United Kingdom
34	Nokia Oyj	Information Technology	Finland
35	Johnson Controls International PLC	Industrials	Ireland
36	Orsted A/S	Utilities	Denmark
37	Hewlett Packard Enterprise Co	Information Technology	United States
38	SAP SE	Information Technology	Germany
39	Konica Minolta Inc	Information Technology	Japan
40	Kone Oyj	Industrials	Finland

Rank	Company	Sector	Country
41	Adidas AG	Consumer Discretionary	Germany
42	Siemens Gamesa Renewable Energy SA	Industrials	Spain
43	Sumitomo Electric Industries Ltd	Consumer Discretionary	Japan
44	Koninklijke KPN NV	Communication Services	Netherlands
45	Smurfit Kappa Group PLC	Materials	Ireland
46	Ecolab Inc	Materials	United States
47	Prysmian SpA	Industrials	Italy
48	Natura Cosmeticos SA	Consumer Staples	Brazil
49	Ball Corp	Materials	United States
50	Sims Metal Management Ltd	Materials	United States

Showing 1 to 50 of 200 entries

For full results, including last year's Clean 200 companies that didn't make the cut this year, this year's new entrants and companies excluded from our 2020 list, click here:

Clean 200_2020_Download.

THE CLEAN200 Methodology

The Clean200 are the largest 200 public companies ranked by green energy revenues. It was first calculated on July 1, 2016 and publicly released on August 15, 2016 by *Corporate Knights* and *As You Sow*. The current list has been updated with data through the end of 2019 (December 31, 2019).

The Clean200 companies are listed by their estimated green revenues in USD. The dataset is developed by multiplying a company's most recent year-end revenues by its clean revenue estimate, primarily sourced from Corporate Knights Research. In order to be eligible, a company must have USD revenue of at least $1 billion (most recent available fiscal year end data) and earn more than 10% of total revenues from clean sources.

The Clean200 uses negative screens. It excludes all oil and gas companies and utilities that generate less than 50 percent of their power from green sources, the top 100 coal companies measured by reserves, the top 100 oil & gas companies as measured by reserves, as well as all fossil fuel companies, majority fossil-fired utilities, pipeline and oil field services companies, and other fossil fuel-related companies screened on *As You Sow's* Fossil Free Funds. In addition, the Clean200 excludes weapons companies including major military arms manufacturers found on the SIPRI Top 100 arms-producing and military services list, as well cluster munitions, nuclear weapons, and civilian firearm manufacturers screened on *As You Sow's* Weapon Free Funds. The Clean200 also excludes palm oil, paper/pulp, rubber, timber, beef, and soy producers that are screened on *As You Sow's* Deforestation Free Funds, companies using child or forced labor, and companies who engage in negative climate lobbying are not included. The full list of exclusionary screens is provided below.

Clean200 Negative Screens	**Criteria**	**Number of Companies Excluded**
Farm Animal Welfare	Identifies company laggards (Tier 5 or 6) on Farm Animal Welfare practices, based on the Benchmark for Farm Animal Welfare.	0
Industrial Meat	Identifies meat companies, according to FactSet RBICS.	0
Corporate Fines, Penalties or Settlements	Identifies laggard companies (bottom quartile) with high monetary fines, penalties and settlements paid as a percentage of total revenue.	2
Tobacco	Identifies companies which earn more than 5% of revenue from tobacco using FactSet's RBICS.	0
Controversial Weapons	The SIPRI Top 100 arms-producing and military services companies in the world (Link); Cluster munitions and landmines, nuclear weapons, gun manufacturers screened by *As You Sow Weapon Free Funds tool (Link)*	2
Conventional Weapons	The SIPRI Top 100 arms-producing and military services companies in the world (Link); Cluster munitions and landmines, nuclear weapons, gun manufacturers screened by *As You Sow Weapon Free Funds tool (Link)*	2
Farm Animal Welfare	Identifies company laggards (Tier 5 or 6) on Farm Animal Welfare practices, based on the Benchmark for Farm Animal Welfare.	0
Industrial Meat	Identifies meat companies, according to FactSet RBICS.	0

Corporate Fines, Penalties or Settlements	Identifies laggard companies (bottom quartile) with high monetary fines, penalties and settlements paid as a percentage of total revenue.	2
Tobacco	Identifies companies which earn more than 5% of revenue from tobacco using FactSet's RBICS.	0
Controversial Weapons	The SIPRI Top 100 arms-producing and military services companies in the world (Link); Cluster munitions and landmines, nuclear weapons, gun manufacturers screened by *As You Sow Weapon Free Funds tool (Link)*	2
Conventional Weapons	The SIPRI Top 100 arms-producing and military services companies in the world (Link); Cluster munitions and landmines, nuclear weapons, gun manufacturers screened by *As You Sow Weapon Free Funds tool (Link)*	2
Small Arms (Hand Guns)	Identifies companies which earn more than 5% of revenue from sale of handguns using FactSet's RBICS.	0
Blocking Climate Policy	Identifies laggards (scored less than E) in climate regulation readiness according to InfluenceMap.	1
Severe Environmental Damage	Identifies companies which meet NBIM exclusion for "Actions or omissions that constitute an unacceptable risk of the Fund contributing to severe environmental damages".	1
Thermal Coal	The FFI Carbon Underground Top 100 companies by coal reserves (Link); Morningstar coal industry company industry classification (Link); Companies which derive at least 30% of revenue from thermal coal as provided by Oxford Smith School, supplemented by corporate financial disclosures.	13
Non-Green Utilities	Any utility that derives less than 50% revenue from green sources; Macroclimate Top 30 public company owners of coal-fired power plants (Link)	28
Tropical Deforestation	Scores less than 2 on Forest 500 scale; Palm oil, paper/pulp, rubber, timber, beef, and soy	8

	screened by the *As You Sow/Friends of the Earth Deforestation Free Funds tool* (Link)	
For-Profit Prison	Identifies companies which own or operate private prisons according to FactSet RBICS and two aggregated private prison divestment lists, from American Friends Service Committee (Quaker) and Enlace International's National Private Prison Divestment Campaign.	0
Repressive Regime	Identifies companies which derive at least 5% of their revenue from countries listed as "worst of the worst" by Freedom House.	0
Global Compact Principles Violators	Companies identified by RepRisk Global Compact database with a "VIOLATOR_OPERATIONS" flag under either of human rights, labour, environment or anti-corruption themes.	0
Gambling	Identifies companies which earn more than 5% of revenue from gambling using FactSet's RBICS.	0
Pornography	Companies classified by "Adult Entertainment" by at least one of the cohort of large pension funds with exclusion lists that Corporate Knights monitors.	0
Excess of conventional over clean energy financing	Based on Bloomberg BNEF data and/or corporate disclosures. Companies who sum of conventional energy financing exceeds new energy financing are removed.	0
Child/Forced labour	Source: Know the Chain. Companies which scored in bottom half of Know the Chain rating are removed	2
Oil &Gas	The FFI Carbon Underground Top 100 companies by oil/gas reserves (Link);	0
Ratio of fossil cap-ex to renewables cap ex is greater than 2:1	Where an oil& gas company derives a minority of revenue from renewable energy sources, those whose capital expenditure towards renewable energy business to fossil-fuel energy business is less than 25% (or not disclosed) are removed	0