The Alliance for Climate Transition

DYNAMIC SUSTAINABILITY LAB™
AT SYRACUSE UNIVERSITY

Top 20 Global Companies in the Energy Transition

2026

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Foreword

Governor Healey has a stated goal of Massachusetts becoming the **global center for climate technology innovation**. But how do you measure that? Massachusetts can lay claim to being the global leader in another sector, Life Sciences, with 19 of the Top20 global life science companies having a presence in the State. They reference a global list and cross reference it with a list of which companies are present here in Massachusetts.

But **who are the top 20 global companies in the energy transition?** There is no comparable list. So ACT-The Alliance for Climate Transition, partnered with the Dynamic Sustainability Lab at Syracuse University to develop such a list, and we are proud to publish it for the first time. We want this list to be the one that people refer to worldwide as **THE reference for climate technology**.

And what does being a leading company in the energy transition mean? They can be characterized as companies that spend money on R&D to develop differentiated clean solutions; who spend a large % of their capex on sustainable infrastructure (manufacturing sites, innovation centers, efficient buildings, etc); who are not only active with organic product development but who are also active in external development, investing in and acquiring startups to disrupt themselves and acquire talent; and who are creating active solutions globally.

I hope that this list becomes an annual report, recording the **changing face of the leaders in the transition**. After all, looking at this list, several didn't even exist 20 years ago. We also hope that it provokes discussion. Why are these the companies on the list and why weren't some others in the Top 20? Most of all I hope this leads to a **thriving and growing cluster of companies all working on open innovation in Massachusetts** and the Northeast region of the US, who, together with local startups and other stakeholdere, can scale up solutions to develop a clean energy future and a diverse climate economy.

We invite you to review the list and send us feedback so we can challenge ourselves on the methodology, and the decisions we made about the criteria and the weightings.

Alistair Pim
Vice President Innovation and Partnerships
ACT

Acknowledgements

ACT is pleased to present the inaugural Top 20 list of global leaders in the energy transition. I recognize that this report would not have been possible without the support and participation from the innovation ecosystem and would like to thank a few specific groups.

I first want to thank the team of interns that have helped me research and compile the data, and developed the report.

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Dynamic Sustainability Lab Team

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With the support and Guidance from Dr. Jay Golden

The list would also not have been possible without the industry experts we reached out to who gave us such valuable feedback.

Industry Experts

Mike Condon, Director of Economic Growth & Partnerships, MassCEC
Anthony DeOrsey, Research Manager, Cleantech Group
Val Livada, Executive Director, Corporate Entrepreneurship Network
Galen Nelson, Chief Climate Officer, MassCEC
Lukasz Skarka, Investment Director USA, InnoEnergy
Mark Shu, Managing Director, Corporate Entrepreneurship Network

Introduction

Our Goal

To Create a List of the Top 20 Companies in the Climate Tech Ecosystem.

Our Cause

Most industries have a global list of corporate leaders and ACT wanted to replicate this concept within our industry to better understand major corporations and their work in the energy transition.

Introduction

This list is the result of a collaborative project between The Alliance for Climate Transition (ACT) and the Dynamic Sustainability Lab at Syracuse University.

About the Alliance for Climate Transition

ACT's North Star is to serve as the trusted business voice and **connective thread for the energy transition** and climatetech industry in the Northeast. We bring together companies, innovators, investors, policymakers, and strategic partners to strengthen markets, accelerate deployment of new technologies, and build a more resilient and competitive regional energy economy.

Our work is anchored in three mutually reinforcing focus areas: Policy engagement, innovation, and workforce development. Together, these efforts position ACT to help the Northeast lead in the transition to a modern, reliable, and competitive energy system.

About the Dynamic Sustainability Lab

The Dynamic Sustainability Lab is a non-partisan think tank and research lab that examines the opportunities as well as risks and unintended consequences resulting from the rapid transition to a new generation of sustainable technologies, strategies, and policies.

Our focus is on providing **interdisciplinary scientific approaches that support organizations** in addressing energy, agriculture, climate & sustainability transitions by identifying the dynamic risks and developing strategies and tools to achieve success.

Company Criteria

To clarify which companies were eligible for this list ACT developed a set of rigorous criteria. These requirements were chosen to ensure that companies chosen are specifically involved in open innovation within the climate tech ecosystem. Furthermore, companies are required to be of a certain size to ensure they can facilitate partnerships and already have a global presence in the industry.

Investing

Companies must have their own intellectual property that they are working on and actively investing in both organic (R&D) and inorganic growth (M&A and investments in startups) in the climate tech ecosystem to decarbonize emissions

Revenue

Companies' 2025 revenue must be at least

$2.25B

Climate Tech

Can reasonably be classified as a company leading the energy transition (majority of revenue or largest segment by revenue is climate/cleantech)

Sector

Company sector must be related to the energy transition and include*: solar energy, wind energy, energy storage, sustainable infrastructure, electrification, energy efficiency, grid modernization, decarbonization, and transportation

*non exhaustive list

Sourcing Companies

Companies were complied from a variety of lists across industries and ACT's database. All companies were then strictly examined against the criteria to confirm eligibility.

Source Locations Include:

- Reuters 100 Innovators leading the Global Transition List
- Sustainability Magazine's Top 250 Sustainable Companies
- Times' Most Sustainable Companies of 2024
- Corporate Knights Global 100
- Regional ACT and SPN information
- Cleantech Group

>100

companies initially examined

50

companies specifically researched

The Statistics

The following data was complied for all the companies chosen. The statistics help to characterize each companies economic success, geographic placement, and climate tech involvement. All data utilized is publicly available in 2025 company reports (9/50 companies' 2025 reports were not yet published at the time of research, so 2024 data was used), except the number of relevant investments and the number of merger & acquisition deals were defined and obtained by Cleantech Group.

- **Country of Origin**
- **2025 Revenue**
- **Growth in Profits**
- **1 Year Growth in Revenue**
- **5 Year growth in Revenue**
- **Number of 'Relevant' M&A Deals**

- **Percent of Revenue spent on R&D**
- **Number of 'Relevant' Investments**
- **Percent of Revenue from Clean Technology**
- **Revenue made from Clean Technology**
- **Percent Green Capex**

Ranking Methodology

For the Top 20 Rankings, ten categories were analyzed and weighted.

Metric	Weight
2025 Revenue	10%
1 yr Growth in Revenue	5%
5 yr Growth in Revenue	5%
1 yr Growth in Profit	10%
% Revenue from Cleantech	12.5%
$ Revenue from Cleantech	12.5%
% Revenue spent on R&D	15%
% Green Capex	5%
# of Relevant M&A Deals	12.5%
# of Relevant Investment Deals	12.5%

Each company was assigned a ranking based off of their stat in the category compared to the rest of the companies.* Each ranking was then given a weight, as seen by the corresponding percentages.

The company's ranking in each category was multiplied by the respective weight and added together to give each company a score out of 10.

In the event of a tie, the amount of revenue produced from cleantech products was used as the tie-breaking factor.

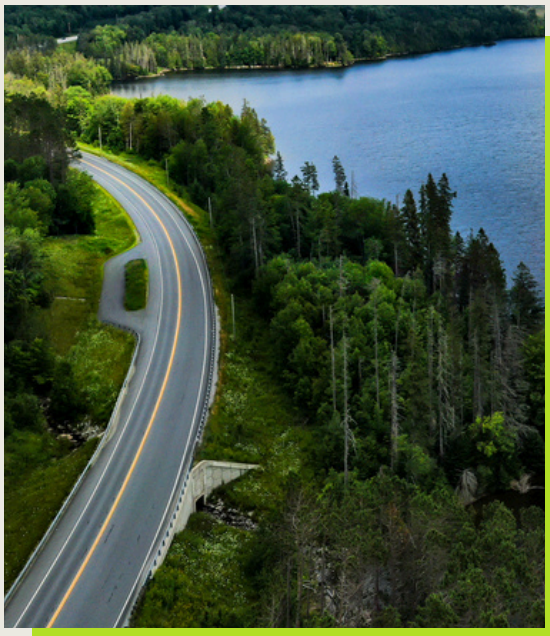
*Typically 5 companies per score (1-10) per category, however there were changes made for ties, 0s, no data, and negative growth

The Top 20

The initial Top 20 List created from the previous stated methodology is below.

It is important to note that since percent of revenue from clean technology was weighted heavily, larger corporations may be lower than expected due to their diverse portfolio.

1. **Contemporary Amperex Technology (CATL)**
2. **Alstom**
3. **Emerson Electric**
4. **Vestas**
5. **Siemens Energy**
6. **Tesla**
7. **Schneider Electric**
8. **Eaton**
9. **First Solar**
10. **BYD**
11. **LG Energy Solution**
12. **Iberdrola**
13. **GE Vernova**
14. **ABB**
15. **Rivian**
16. **Johnson Controls**
17. **Mitsubishi Electric**
18. **E.ON**
19. **Saint-Gobain**
20. **Hitachi**



The Top 20:
What They Produce

Battery & EV/ Mobility Companies

BYD
- Electric vehicles including busses and trucks
- Plug in hybrid vehicles

CATL
- Battery manufacturing
- Specializing in lithium-ion batteries for electric vehicles and energy storage systems

LG Energy Solution
- Advanced lithium-ion batteries for electric vehicles, mobility, and IT devices
- Energy storage systems for residential and industrial use
- Battery management software and diagnostic services

Rivian
- Automaker specializing in electric adventure vehicles and commercial electric delivery vans

Tesla
- Electric vehicles
- Energy storage systems
- Solar energy products- panels, roofs, batteries

Renewables & Utilities

E.ON
- Electricity and gas network- energy service providers and grid operators
- Networks, infrastructure solutions- district heating and cooling, heating (incl. steam), cooling, and power supply for mid to large-scale industrial applications.

First Solar
- Solar panel manufacturer
- PV modules for large scale utility power plants

Iberdrola
- Generation, distribution, and supply of electricity
- Focus on renewable energy and smart grids
- Extensive electricity network infrastructure and provides smart energy solutions

Vestas
- Designing, producing, installing, and servicing onshore and offshore wind energy solutions
- Manufacture turbine blades, nacelles, and hubs

The Top 20:
What They Produce

Energy, Grid, & Electrification Companies

ABB
- Electrification and automation
- Enabling sustainable, resource-efficient industrial, utility, and infrastructure operations

Eaton
- Power management, electric components, industrial controls, and thermal management
- Focusing industries like data centers, aerospace, and renewable energy

Emerson Electric
- Manufactures automation solutions, industrial software, and control systems
- AI-powered energy management information systems, smart sensors, and digital twin technology

GE Vernova
- Power generation and electrification/ grid technology

Hitachi
- Grid electrification, renewable energy integration, and sustainable transportation

Johnson Controls
- HVAC equipment and building automation systems
- Focus on energy efficiency, sustainability, and facility management

Mitsubishi Electric
- Power generation and distribution
- Switchgear technology and air source heat pumps

Schneider Electric
- Energy management, industrial automation, and energy-efficient software solutions
- Electrical distribution equipment, building management systems, energy efficient data centers, and IoT-enabled solutions

Siemens Energy
- Power generation, transmission, and storage

Industrial, Infrastructure, & Materials

Alstom
- Energy efficient electric trains
- Hydrogen-powered trains and battery-driven green traction solutions

Saint-Gobain
- Construction and high-performance materials ex. glass, insulation, abrasives, and piping
- Focus on sustainability, low carbon footprint, and energy efficiency

The Top 3 Companies

Contemporary Amperex Technology (CATL)
Ningde, Fujian Province, China

$61.44B
2025 Revenue

5.22%
Percent of Revenue Spent on R&D

98.5%
Percent of Revenue from Cleantech

$60.52B
Dollars of Revenue from Cleantech

Battery Manufacturing

Origin:
Spun off from ATL in 2011

Alstom
Paris, France

$21.46B
2025 Revenue

2.8%
Percent of Revenue Spent on R&D

82.4%
Percent of Revenue from Cleantech

$17.68B
Dollars of Revenue from Cleantech

Railway Transporation

Origin:
1928 merger of SACM & Compagnie Française Thomson-Houston

Emerson Electric
St. Louis, Missouri, USA

$18.02B
2025 Revenue

8.1%
Percent of Revenue Spent on R&D

70%
Percent of Revenue from Cleantech

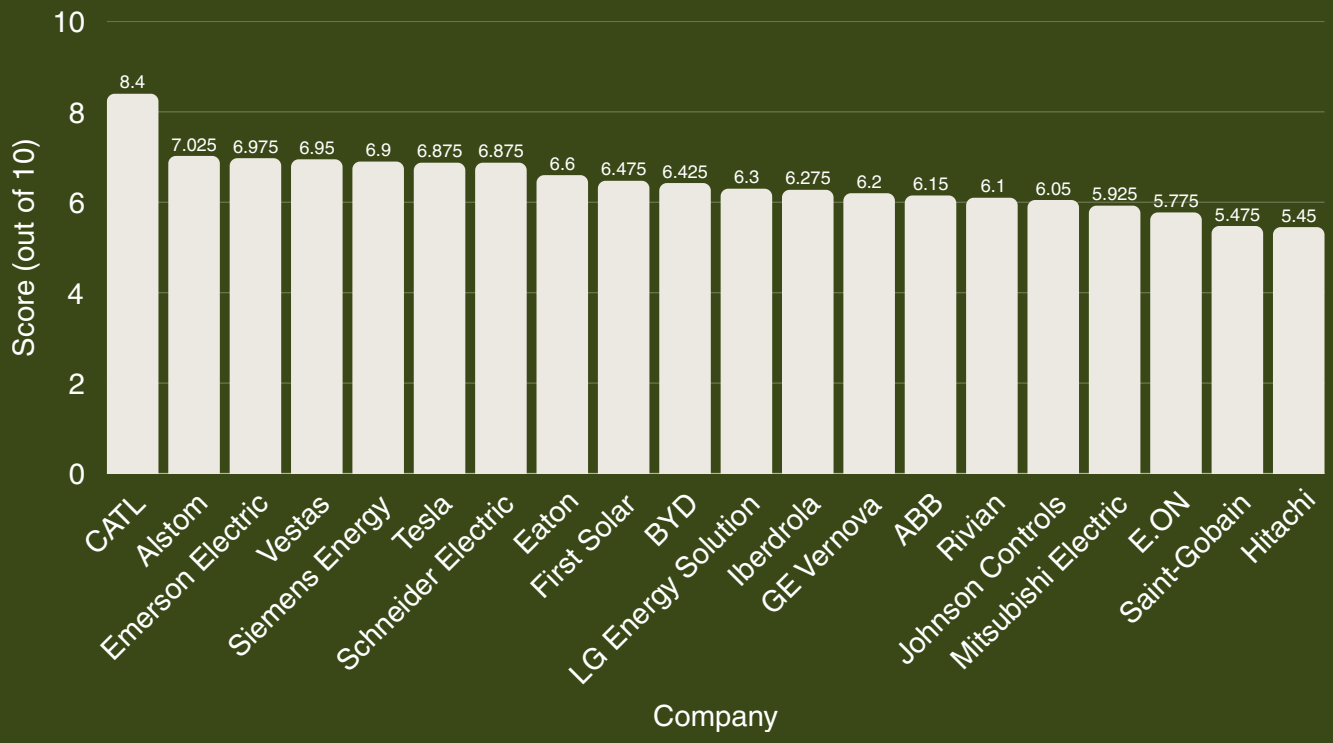
$12.61B
Dollars of Revenue from Cleantech

Automation & Process Control

Origin:
Originally established as The Emerson Electric Manufacturing Company in 1890

Key Charts

Total Score

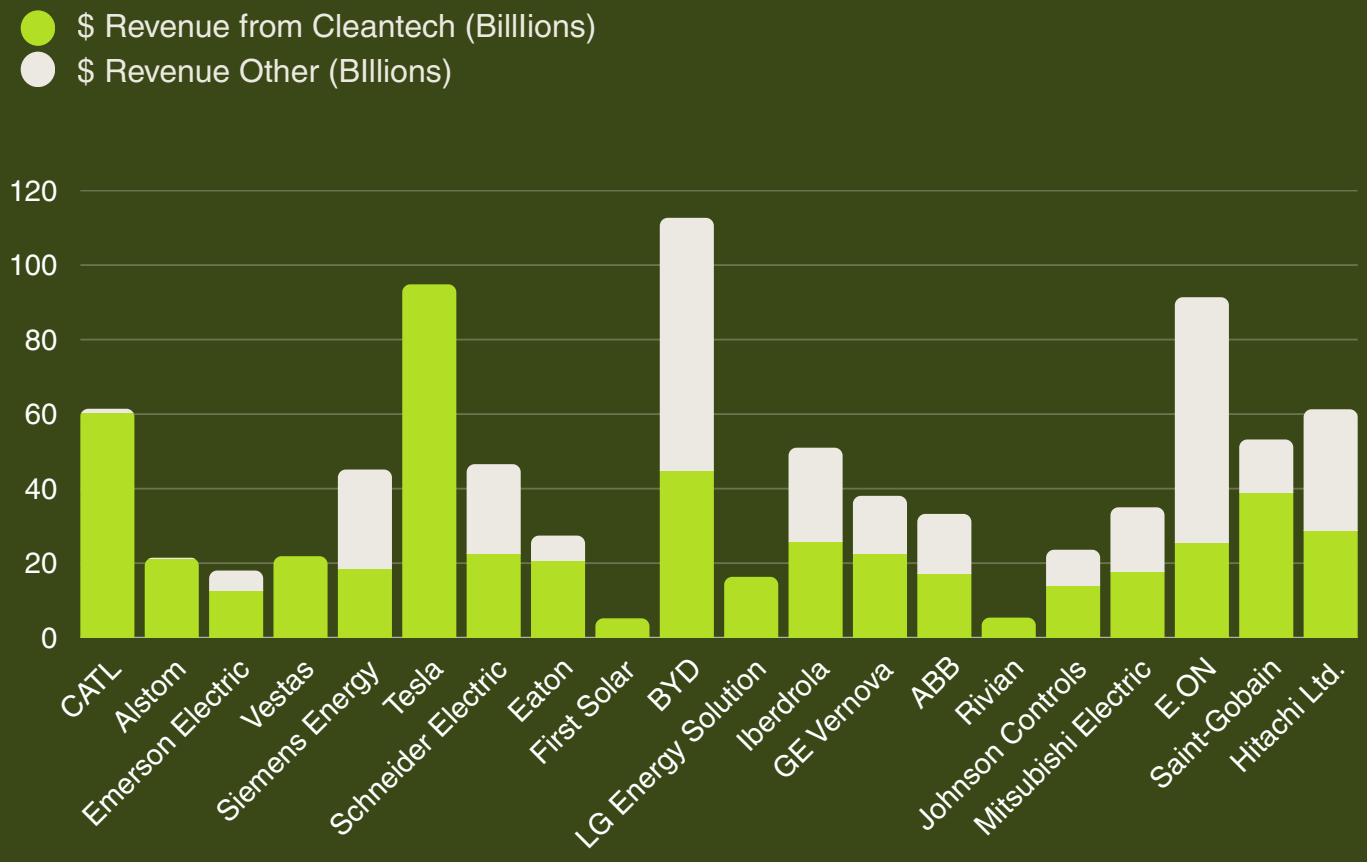


The final scores for the Top 20 companies are shown above. An important component to consider is that there are not huge discrepancies across companies since the rankings are done in comparison to each other. The final score is not as indicative of a company's impact in the energy transition as is their final ranking.

The top five companies out of 50 by 2025 revenue are EDF Energy, BYD, Tesla, Enel Group, and E.ON. EDF Energy and Enel Group did not make it into the Top 20, demonstrating that this list is hoping to recognize those actively innovating and investing in the energy transition and not just measuring pure financial success.

Key Charts

Cleantech Revenue by Company

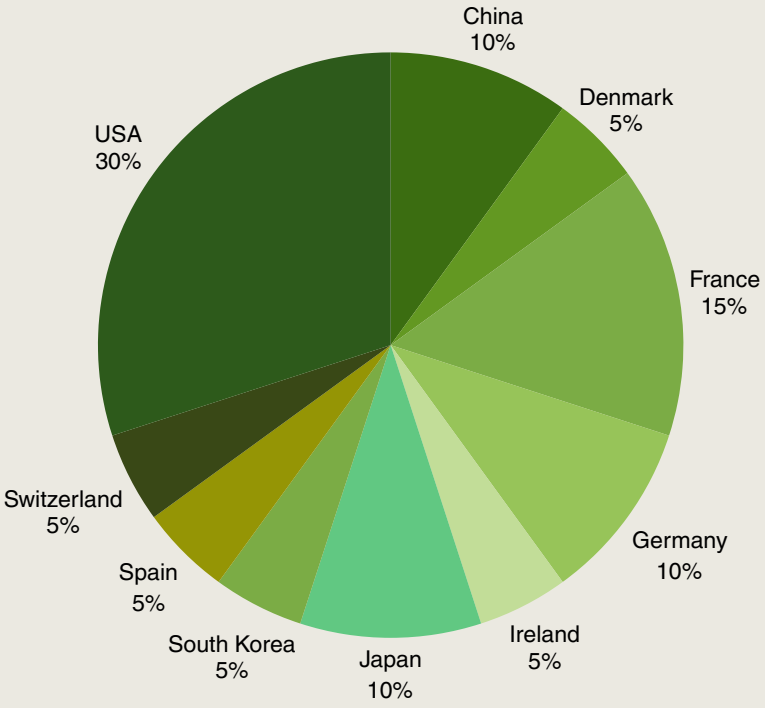


This graph displays the companies' revenue breakdown between their revenue from cleantech and other revenue. This data was sometimes difficult to discern depending on availability of data and standardization of what cleantech means. In general, companies that were more transparent with their data were favored in this category. In some cases, there were multiple statistics for this data based off different sources with different standards. In those cases, an average was calculated and used.

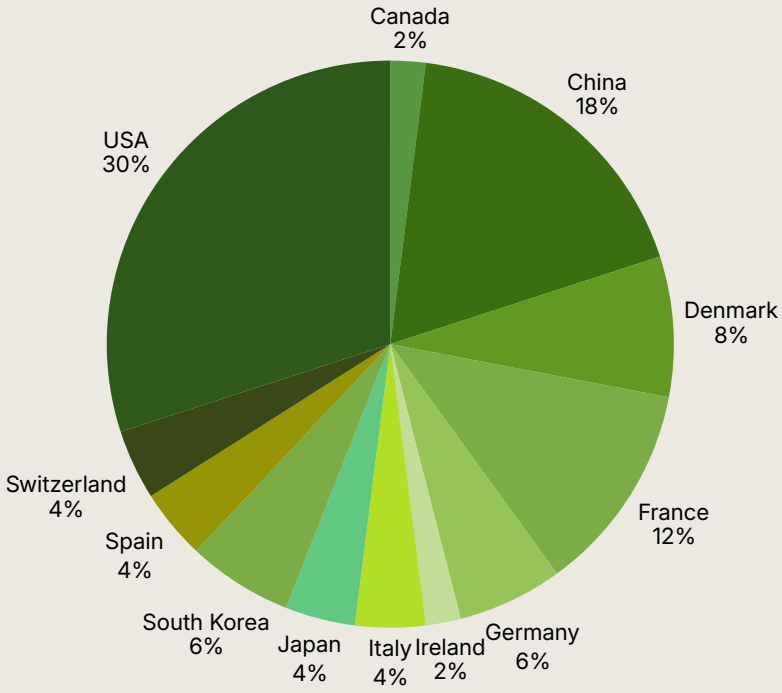
The visual representation of revenue breakdown above helps to display how the weighting impacts the final rankings. While BYD has the highest overall revenue of the Top 20 companies, because percent and dollars of clean revenue have a high weighting, BYD falls to the middle of the pack. This emphasizes that the Top 20 list is not just looking at the largest company, but focuses on who is leading the transition.

Key Charts

Top 20 Company Headquarters Locations



Top 50 Company Headquarters Locations



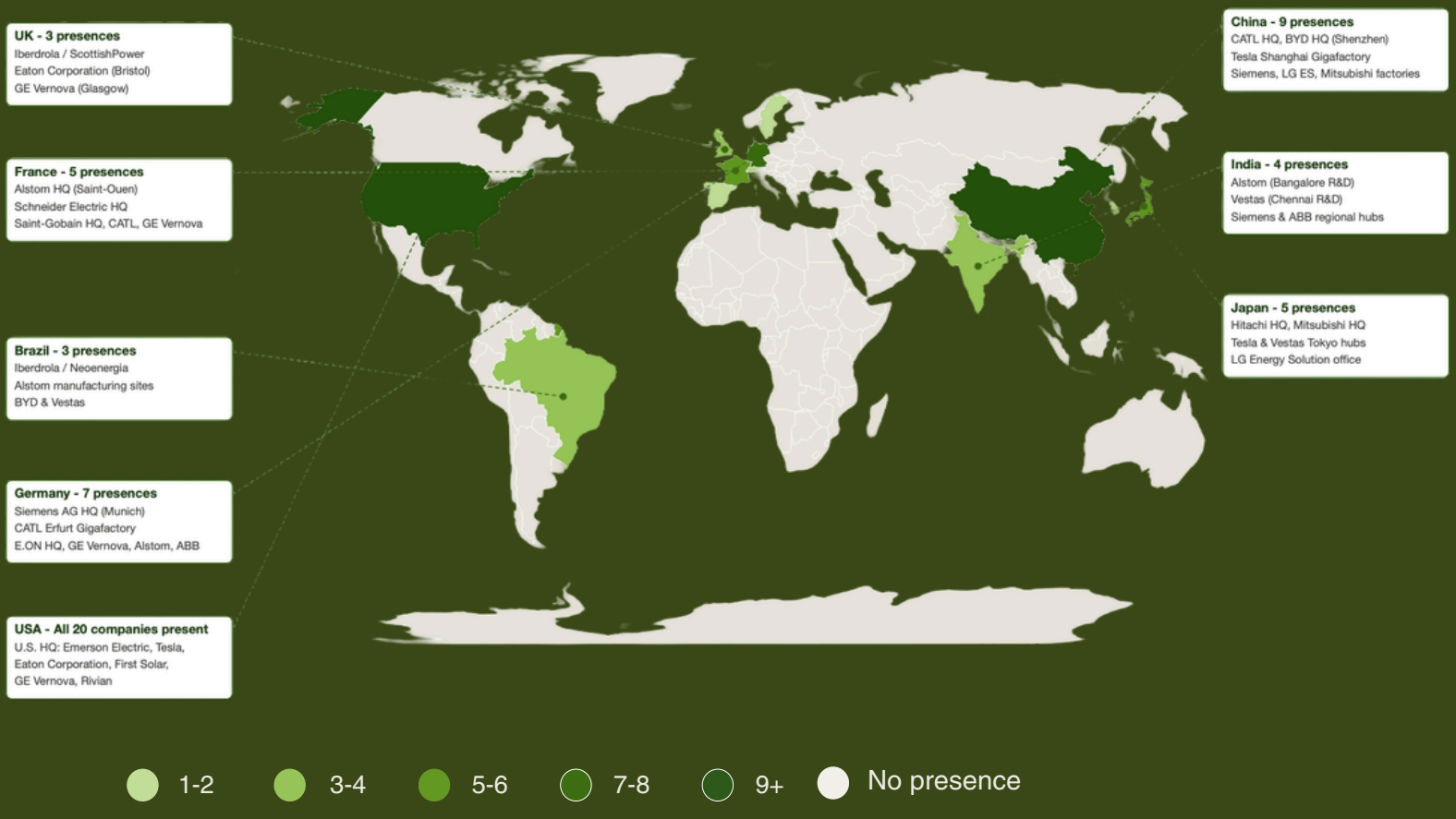
- Another component ACT wanted to highlight was that the majority of companies leading the broader energy transition are headquartered in the United States. This demonstrates the strength of the U.S. economy and the size of the market in the U.S.

- When including the Top 50 Companies China moves into second place (over France) with 18% of the companies headquarters and the United States having 30% of the headquarters. Most of these additional China based companies are heavily focused on solar panels and have a high percentage of revenue from clean technology.

Key Charts

Global Presence by Country

Countries shaded by number of HQ, R&D, manufacturing, or regional office presences across the Top 20 list.*



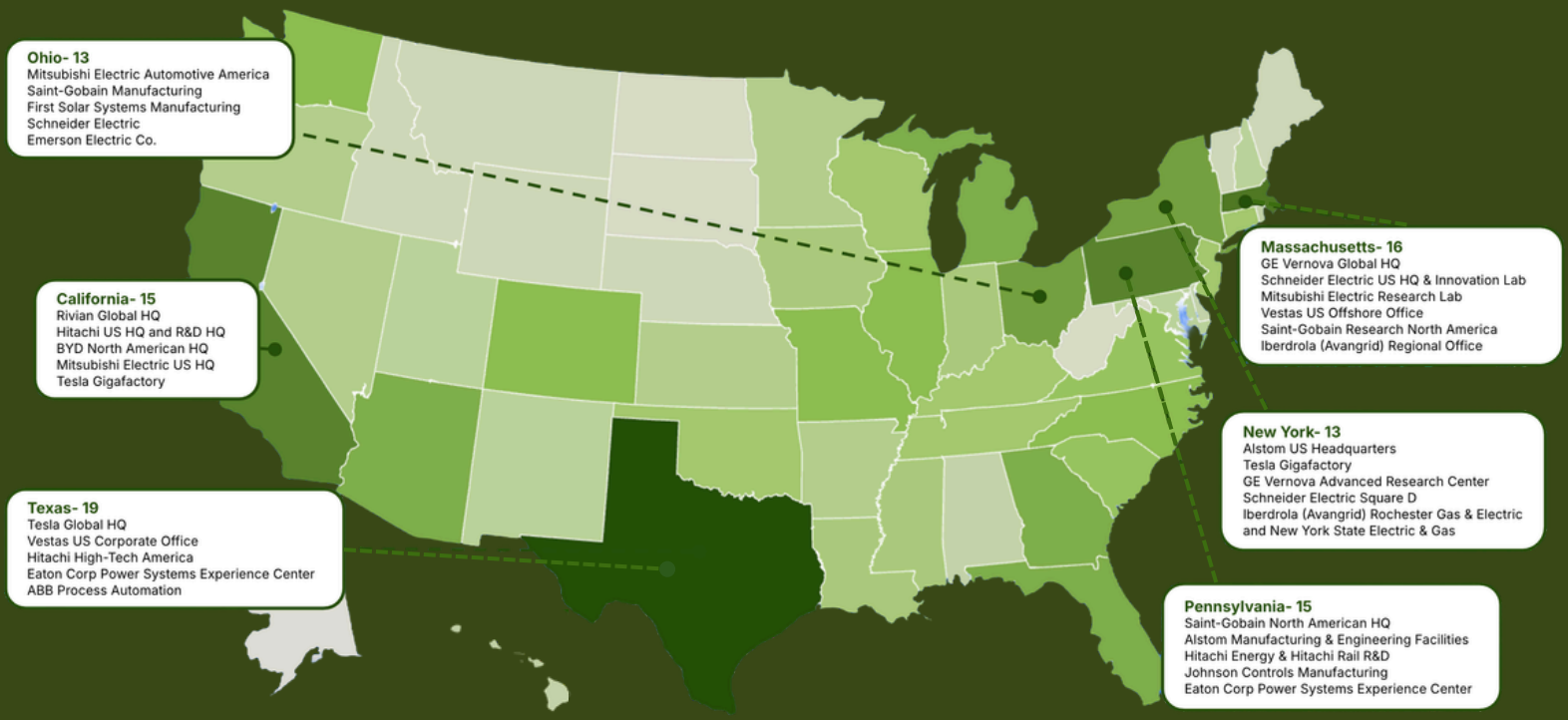
- In addition to globally spread company headquarters, these companies also have innovation and manufacturing centers as well as regional headquarters around the world. China and the United States appear as the global leaders of where the Top 20 companies are locating their facilities. Many companies have locations in multiple countries as well as within a country.
- There are two clusters that appear on this map: one in Western Europe, and one in Eastern Asia. In the European cluster Germany has the most presences followed by France, while in the Asian cluster China leads the way with Japan following.

*This map reflects large headquarters, research labs, offices, and manufacturing centers in the world for the Top 20 companies, not all of their offices or sites.

Key Charts

US Presence State

Countries shaded by number of HQ, R&D, manufacturing, office, project, or hiring presences across the Top 20 list.



- Texas leads the US states in terms of presence of the Top 20 companies missing only First Solar. However, while some states like Texas and California stand alone in their leadership, there is a cluster in the Northeast with Massachusetts, New York, Pennsylvania, and Ohio extending out towards the Midwest with Michigan having 12 presences and an additional 11 presences in Illinois. Additionally, in the Southeast Florida and Georgia have 12 each with North Carolina and South Carolina adding 11 and 10 more presences in that region respectively. It is also evident that a gap appears in the northern Great Plains and Rocky Mountain regions.

- It is important to note that this map differs from the global one above as it reflects the inclusion of smaller offices, subsidiaries, spin offs, and places where employees of the Top 20 companies are working on site, but may not have a physical office space.

Top 10 Tech Companies Buying Clean Energy

We acknowledge that another crucial part of the energy transition are the buyers of clean technology. Many of these top buyers are technology companies mostly working on data center buildout. While they are not participating in R&D of clean energy, we wanted to recognize their contribution to the ecosystem. The following list represents companies that are encouraging clean energy innovation through power purchase agreements (PPAs), investing in clean energy, and working towards Net Zero goals.

1. **Amazon (AWS)**
2. **Meta**
3. **Microsoft**
4. **Google (Alphabet)**
5. **Apple**
6. **NVIDIA**
7. **Salesforce**
8. **IBM**
9. **Samsung**
10. **Intel**

Top 10 Developers of Clean Energy

Another aspect of the clean energy transition we wanted to recognize in this report are the developers. These companies create large scale renewable energy projects in solar, wind, storage, and other forms of renewable energy. Some of these companies participate in R&D while others strictly buy technology to deploy. Additionally, some of these companies were evaluated for the Top 20 list, and there is some overlap coming from E.ON and Iberdrola. The following list represents the companies with the most gigawatts of clean energy deployed.

1. **Southern Petrochemical Industries Corporation (SPIC)**
2. **Canadian Solar**
3. **Goldwind**
4. **China Three Gorges Renewables**
5. **E.ON**
6. **Enel**
7. **Engie**
8. **Brookfield Renewable Partners**
9. **Constellation Energy**
10. **Iberdrola**

Next Steps

ACT envisions this list will shift **annually** as companies priorities and data change

Finding **accurate and transparent** environmental data for corporations can be challenging but this work is critical in understanding the landscape.

Looking forward ACT has analyzed which corporations have a **presence in Massachusetts** and the Northeast, and will engage them in ACT's networks if not already involved.

- By identifying these critical corporations ACT can **encourage and facilitate partnerships**, investments, and deals within the space and with cleantech startups.

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