

Agents of Change

The companies exerting powerful environmental leadership and radiating change

We wrote recently about the myriad initiatives and actions by policy makers and stakeholders across geographies to change the course of climate change in a report we titled *Climate action: The ripple became a swell and real progress is underway*.

Today, we dive into the actions by corporations to design and accomplish specific decarbonisation goals across their supply chains to properly change the world.



Taiwan Semiconductor Manufacturing Company, Limited

A recent news headline in Denmark and Taiwan caught our eye and serves as a prime example to introduce what corporates are up to: TSMC, the world largest semi-conductor foundry company with a market capitalisation of US\$380bn, announced that, from 2025, it will buy all the electricity generated by Orsted's 920MW offshore wind park situated off the coast of Taiwan. TSMC and Orsted have signed the largest single Corporate Power Purchase Agreement (CPPA) known thus far with a fixed price for 20 years. Why would TSMC sign such an agreement?

You may remember the line from Spider-Man, "with great power comes great responsibility". Today, many large corporations are so powerful, thanks to their technology prowess or size, that they can dictate their terms to suppliers. We will call them 'Agents of Change' as they are in pole position to exert economic, ethical and environmental leadership to affect change in entire eco-systems. Within their ESG frameworks, one of the areas where these behemoths can properly exert positive influence is the environmental impact of their businesses. They are that first domino, capable of triggering a chain reaction for good. Maybe TSMC woke up one morning and decided to partner with Orsted. Probably, TSMC, the third largest supplier to Apple, wanted to ensure the perennality of their relationship further to Apple's commitment to ensure all its suppliers are using 100% renewable electricity by 2030.

It is fair to assume that the Agents of Change are leveraging their position to influence suppliers – and potentially also incentivizing them – to create a win-win relationship. That got us thinking about the purchasing power of the largest companies in the world – our Agents of Change – and the environmental policies they are championing.

World's largest 10 companies (excluding Oil & Gas and Healthcare) by cost of revenues¹

Names	Cost of revenues (US\$ billion)	Market cap (US\$ billion)
Walmart	408	389
Toyota Motor Corp.	207	220
Volkswagen AG	206	91
Amazon.com Inc.	192	1,581
Bershire Hathaway Inc.	191	523
China State Construction	184	31
Glencore	175	32
Apple Inc.	169	1,976
Hon Hai Precision Industry	160	38
Daimler AG-Registered Shares	147	58

¹Source: Bloomberg, 16 September 2020. Cost of revenues is the total cost of manufacturing (traditional cost of goods sold) and delivering (selling, marketing and distribution) a product or service to customers.

The 10 largest global companies by cost of revenues (excluding O&G and Healthcare) – we use cost of revenues as a proxy for purchasing power – spend in aggregate the equivalent of 2% of global GDP. Their combined spending power makes them the 8th largest economy in the world, on par with Italy. It is fair to ask, therefore, who has more global economic power, these ten Agents of Change or Italy?

When we think about the decision-making processes at the highest levels of government, the management of country-to-country relationships and of various groups with diverging objectives, authorities' influence on partners tends to be slow and can be limited. Our Agents of Change, on the other hand, can cut through the red tape and lay out clearly for existing and potential partners/suppliers their conditions for doing business. Apple's CEO or top management team can decide at a meeting to only work with zero-carbon partners by 2030 and soon enough TSMC will oblige. It is fair to expect these suppliers to play the same role with their own supply chains, thereby radiating positive change through their eco-systems. As each of these mega Agents of Change has, on average, over 100 suppliers, a decision emanating from one Agent and spreading three steps down the supply chain could convert 1mn businesses.

So, what are these Agents of Change doing with all that power? It seems they have followed a similar pattern in terms of embracing a climate policy. They generally started by making genuine improvements internally to reduce direct or Scope 1 emissions, and have moved on to upgrading the climate impact of their extended eco-systems by reducing indirect (Scope 2 and 3) emissions by migrating to the use of renewable sources of electricity and making supplies and products carbon neutral or carbon free.

We present below the environmental objectives of a diverse sample of these Agents of Change: Walmart, Toyota, Amazon, Apple and Daimler. Each has emissions policies that impact their suppliers and we should expect to see many of these suppliers accelerate their adoption of 'clean' practices. For each Agent we list their top 10 suppliers, i.e. those with the most at stake, those most highly incentivised to align their policies to the demands of the Agent so as not to be the domino that risks hindering the chain reaction. This is a diverse group of companies in terms of sectors and locations and, therefore, the impact of decisions made at the top of the pyramid can have far-reaching benefits through entire value chains.

All these developments are super encouraging but let's also remember that the world is quickly exhausting the 1.5°C degrees 'warming budget' that nations signed up to as part of their Paris Agreement commitments in 2015.

Walmart Walmart

Walmart's emissions-reduction plan has been approved by Science Based Targets (a joint initiative of CDP, the UN Global Compact, the World Resources Institute and WWF), meaning that its energy-specific targets are indeed 'science-based' and in alignment with the level of decarbonisation required to keep the global temperature increase below 2°C compared to pre-industrial levels, per the 2015 Paris Climate Agreement.

- Reach 18% reduction in emissions in its own operations by 2025;
- Power 50% of operations with renewable sources of energy by 2025 (29% achieved by 2020);
- Project Gigaton™: Reduce Scope 3 (value chain) greenhouse gas emissions by 1 billion metric tons (a gigaton) by 2030, equivalent to removing more than 211 million passenger vehicles from U.S. roads and highways for a year; suppliers reported they avoided over 136 million metric tons (MT) of emissions in 2019 with more than 2,300 suppliers participating in Project Gigaton;
- Work with suppliers to reduce or avoid greenhouse gas emissions in the China value chain by 50 million MT by 2030;
- Recognise Giga-Gurus: these are suppliers that have set SMART (specific, measurable, achievable, relevant and time limited) goals, agreed to share them publicly, and have avoided emissions in the most recent reporting year.

Walmart's top 10, which are each, in their own right, Agents of Change due to their size and reach:

Lancaster Colony Corp.	Tyson Foods Inc.
McKesson Corp.	Krat Heinz Co.
Procter & Gamble Co.	Nestle
Bershire Hathaway Inc.	Apple Inc.
PepsiCo Inc.	Unilever

Source: Bloomberg, Top suppliers ranked by Walmart spend


TOYOTA Toyota

Toyota is embracing a broad reaching and very ambitious 'Challenge of Achieving Zero' by 2050 which seeks, as far as possible, to:

- Reduce CO₂ emissions generated during driving by new/next generation vehicles (conventional engines and electrified vehicles) to zero;
- Reduce CO₂ emissions generated throughout the vehicle's life cycle – including materials and parts manufacturing, assembly and maintenance, to disposal and recycling – to zero;
- Reduce the CO₂ emissions generated by the plants that produce cars to zero.

On the road to those goals, Toyota has set specific 2025 targets for emissions too:

- Reduce CO₂ emissions from global plants by 30 percent compared to 2013 levels and reach 25 percent generation from renewable electricity (11% reduction attained by 2019);
- Reduce average CO₂ emissions from new vehicles by more than 30% compared to 2010 levels and reach cumulative sales of more than 30 million electrified vehicles (20% reduction reached by 2019 and 15 million electrified vehicles sold); Reduce CO₂ emissions by more than 18 percent throughout the entire vehicle life cycle (during manufacturing and operation) compared to 2013 levels.

Toyota's global, intricate and measurable environmental action plan also extends to minimising and optimising water usage, the establishment of a recycling-based society and systems, as well as the establishment of a future society in harmony with nature

Toyota's top 10 suppliers:

Denso Corp.	Futaba Industrials Co.
Aisin Seiki Co.	Panasonic Corp.
Toyota Boshoku Corp.	Valeo
Toyota Tsusho Corp.	Toyoda Gosei Co.
Hino Motors Ltd.	Toyota Industries Corp.

Source: Bloomberg, Top suppliers ranked by Toyota spend


amazon Amazon

Amazon, together with Global Optimism, has established The Climate Pledge, a commitment to reach net zero carbon – by deploying renewable energy, investing in sustainable buildings and mobilising supply chains – by 2040, fully ten years earlier than the climate crisis mitigation pledges in the Paris Agreement.

Under this umbrella, Amazon has set the following targets:

- Run on 100% renewable energy by 2025 (42% attained by 2019);
- Make 50% of all shipments net zero carbon by 2030;
- Amazon and the We Mean Business coalition are partnering to encourage companies to accelerate their goals to meet The Climate Pledge, mobilize supply chains to take measurable action on climate change, and determine accountable means for companies to integrate nature-based solutions in their climate strategies.

As an example of the impact of Agents of Change, Mercedes-Benz has signed The Climate Pledge and... Amazon is purchasing 1,800 electric delivery vehicles from Mercedes-Benz.

Amazon's top 10 suppliers:

United Parcel Service Inc.	Johnson & Johnson
United Natural Foods Inc.	Intel Corp.
Procter & Gamble Co.	Dell Technologies Inc.
Hon Hai Precision Industry	HP Inc
Microsoft Cor.	Unilever

Source: Bloomberg, Top suppliers ranked by Amazon spend



Apple Inc.

Apple is already carbon neutral and plans to make all its products carbon neutral by 2030. To accomplish this, products will be made entirely with clean energy by 2030, therefore migrating all suppliers to 100% renewable electricity (today, about half of Apple's carbon footprint is from the electricity used in manufacturing). So far, 72 manufacturing partners in 17 different countries have committed to 100% renewable energy for Apple production, and Apple's stores, offices, and data centres are powered 100% by renewable electricity.

Apple's top 10 suppliers:

Hon Hai Precision Industry	Intel Corp.
Pegatron Corp.	Jabil Inc.
Taiwan Semiconductor Mfg	Compal Electronics Inc.
Samsung Electronics Co.	Sharp Corp./Japan
LG Display Co.	SK Hynix Inc.

Source: Bloomberg, Top suppliers ranked by Apple spend

DAIMLER Daimler

In 2019, Daimler introduced 'Ambition 2039', its path to sustainable mobility and plans for the company's new vehicle fleet (new cars throughout the entire life cycle worldwide; new trucks and buses in operation in Europe, Japan and NAFTA) to be CO₂ neutral by 2039. Daimler has been working with its suppliers in a collaborative way and we wouldn't be surprised to see clear targets for its value chain in the near-term. Moreover, Daimler has set the following targets at the corporate level:

- All production facilities in Europe to be CO₂ neutral by 2022, with 100% of purchased electricity coming from renewable sources;
- 25% of all vehicles to be all-electric by 2025 and over 50% of passenger cars to be plug-in hybrid or all-electric by 2030;
- 40% and 50% reduction in CO₂ emissions of new car fleet and global operations, respectively, by 2030 versus 2018;
- Mercedes-Benz Cars & Vans plans to establish CO₂ targets as a key criterion for selecting suppliers and concluding supplier agreements, given that 16 percent of CO₂ emissions (Scope 1, 2 and 3) come from the supply chain;
- Future vehicle models branded EQ will have batteries whose total CO₂ footprint will be reduced by considerably more than 30 percent thanks to an agreement with Chinese battery-cell supplier Farasis Energy which will produce batteries using renewable electricity.

Daimler's top 10 suppliers:

Magna International Inc.	ArcelorMittal
ZF Friedrichshafen	Motherson Sumi Systems
Continental	Tenneco Inc.
Lear Corp.	Cummins Inc.
Valeo	Adient

Source: Bloomberg, Top suppliers ranked by Daimler spend

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