Explanatory material for shareholders

Regarding Toyota's electrification strategy

May 30, 2022

Greenpeace Japan

Climate change is one of the most pressing issues today, and greenhouse gas emissions from cars account for some 25%[1] of total global emissions. Around the world, policies encouraging a shift towards "zero-emission vehicles" (ZEVs) are already underway.

In July 2021 the European Commission announced the "Fit for 55"[2] policy package as part of the EU's climate targets for 2030, aiming for:

- **Compared to 2021 levels, a 55% reduction in CO2 emissions from new vehicles by 2030, 100% by 2035**
- **All new vehicle sales as ZEVs by 2035 and an end to the production of internal combustion engine vehicles, including hybrids, by the same year**

These proposed measures include provisions for emissions by vans and light commercial vehicles and are set to be voted on in the European parliament in June this year.[3]

Similarly, the Biden administration recently laid out a target and roadmap for 50% battery electric vehicle (BEV) sales by 2030.[4] The proposed bipartisan policy would entail a $7bn USD investment in materials processing, battery production, and recycling to secure an EV supply chain, as well as a $7.5bn USD budget to build the first-ever nationwide public charging station network across the country.

In the context of the global EV transition, the role played by Toyota, one of Japan's leading auto manufacturers, is ever more important. With regards to their target of carbon neutrality by 2050, Toyota said of their approach, "*We make things, transport the things we make, use them, recycle and finally dispose of them. Reducing CO2 emissions to zero by 2050 through this process is the concept of carbon neutrality.*"[5]

Toyota is also a signatory to the Taskforce on Climate-related Financial Disclosures (TCFD), stating that "*under [the] supervision of the Chief Risk Officer (CRO), we promote management focused on proactive preventive measures by gathering and analyzing all risks related to Toyota's corporate activities and behavior, including the area of environment, and developing a system (TGRS) that takes countermeasures*."[6]

However, Toyota has yet to announce a plan for a global ICE phase-out and is not on track to achieve carbon neutrality by 2050.

As a shareholder in Toyota, Greenpeace Japan is reaching out to Toyota shareholders to request Toyota to completely phase out the sale of ICE vehicles and transition to ZEVs.

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[1] UNEP: Transport
[2] 欧州委、温室効果ガス55%削減目標達成のための政策パッケージを発表 (July 15, 2021, JETRO)
[3] Fit for 55: MEPs back CO2 emission standards for cars and vans (News - European Parliament)
[4] FACT SHEET: Biden-Harris Administration Ensuring Future is Made in America (February 8, 2022, White House)
[5] CO2と雇用の関係　豊田章男の危機感 (March 22, 2021, Toyota Times)
[6] Sustainability Data Book p.20 (January 2022, Toyota)

Under Toyota's current proposed strategy, EVs would make up less than 40% of average annual sales by 2030. However, without a complete phase out of ICE vehicles, achieving carbon neutrality is not possible. Additionally, Toyota must expand their ZEV sales plan to cover more than just the Western European market. Without significant action on both the business and environment fronts, Toyota seriously risks falling behind in the global EV market.

■Request to shareholders

Greenpeace is an international environmental NGO operating in more than 55 countries and regions around the world. Using scientific evidence, we operate independently, collaborating with many different partners to work towards peace and environmental conservation, and do not accept donations from any political parties or businesses. As part of our activities, we have purchased the minimum number of shares in Toyota Motor Corporation to participate in the annual general meeting and to exercise our rights as shareholders.

To prevent further acceleration of climate change, as shareholders we encourage Toyota to completely phase out ICE vehicles and transition to ZEVs. We request shareholders to take the following measures:

1. Assess the climate risk inherent to Toyota's current business strategy, and consider your investments accordingly.

2. As shareholders, deepen your engagement with Toyota, request access to information on their lobbying activities and carbon footprint; encourage more progressive decarbonisation efforts.

3. Request that Toyota demonstrate short-, medium-, and long-term plans to phase out sales of new ICE vehicles.

To mitigate the climate risk posed by Toyota's current business strategy, Greenpeace requests that shareholders join us in requesting that Toyota take more significant decarbonisation action.

■Rationale for our request

1) Climate change and corporate activities

As the climate crisis worsens worldwide, there is increasingly a shared understanding of the need and urgency to swiftly enact decarbonisation measures. According to the International Energy Agency's (IEA) Net Zero by 2050 report,[7] greenhouse gas emissions from oil and gas need to decrease by 23% (oil 27%, gas 17%) between 2020 and 2030, and by 80% between 2020 and 2050. With the global transport sector set to grow over the next few decades, the level of emissions per individual vehicle needs to decrease greatly. As BEVs and fuel-cell vehicles (FCEVs) are the only vehicle types aligned with the Paris Agreement,[8] and all other vehicle types need to be rapidly phased out.

Under the latest report released by the Intergovernmental Panel on Climate Change (IPCC) in April this year, global emissions must peak by 2025 at the latest, and 2030 emissions must decrease by 43% compared to 2019 levels.[9] A failure to ensure that the global temperature increase remains under 1.5℃ would result in increased frequency of droughts, coral bleaching, sea level rise, heatwaves and other effects. [10]

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[7] Net Zero by 2050 (IEA), World Energy Outlook 2021 (IEA)
[8] Why are electric vehicles the only way to quickly and substantially decarbonize transport (July 21, 2021, ICCT)
[9] IPCC Sixth Assessment Report (April 2022, IPCC)
[10] UN climate report: It's 'now or never' to limit global warming to 1.5 degrees (April 4, 2022, UN)

COP26 chair Alok Sharma has pointed out[11] that the window to avoid overshooting 1.5℃ is rapidly closing, making the rapid decarbonisation of the transport sector, which accounts for nearly a quarter of all global emissions, ever more crucial.

2) Financial risk

In his opening remarks at the TCFD Summit 2021, hosted by the Ministry of Economy, Trade, and Industry (METI), UN Special Envoy for Climate Action and Finance Mark Carney pointed out that "*The private financial sector will play a critical role in intensifying the impact of these initiatives by shifting capital away from those who are lagging the transition, and towards those who are leading the transition towards net zero.*"[12] There is a growing awareness of the risk of carbon-intensive assets becoming stranded assets.
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In May this year, the Climate Group released a report titled **Japan and the global transition to zero emission vehicles**,[13] which pointed out that if the Japanese economy delays its transition to ZEVs, the resulting financial damage is estimated to be some 78.7tr yen (14.1% of GDP).

The same report also points out that between 2019 and 2020 the global EV markets grew by 137% (EU), 12% (China), and 4% (US).

Assessing the decarbonisation efforts of the top ten global automakers, Greenpeace released the **Auto Environmental Guide 2021** (November 2021), which saw all three of the top Japanese automakers lagging behind the competition, specifically Nissan (5th), Honda (6th), and Toyota (10th).

Auto Environmental Guide 2021 (Greenpeace, November 2021)

	Overall grades	Phase-out of ICE vehicles full marks: 10, weight: 80%	Supply chain decarbonisation full marks: 10, weight: 20%	Resource sustainability	Deductions
Toyota	F--	1.88	4.45		–
Stellantis	F--	2.88	3.05		–
Ford	F-	1.13	5.30		
Daimler	F-	3.13	2.30	+	–
Honda	F+	3.50	1.70	+	
Nissan	F+	3.31	5.40	+	–
Hyundai-Kia	F+	4.81	3.10		–
Renault	D-	4.31	6.75		–
Volkswagen	D	5.19	4.35		–
General Motors	C-	6.69	5.60		–

※This ranking is set to be released by Greenpease annually, examining the top 10 auto manufacturers who make up 80% of the global auto market, assessing the impact of each manufacturer's respective decarbonisation efforts.

[11] COP26: "Window closing" to meet 1.5C warming target - Alok Sharma (October 31, 2021, BBC)
[12] TCFD Summit 2021 (Welcome Messages - Opening Remarks)
[13] Japan and the global transition to zero emission vehicles (May 10, 2022, Climate Group)

■Comparing automakers and their EV policies[14]

Company	Investments and sales targets
Toyota	By 2030, 3.5m annual BEV sales (announced December 2021). Currently Toyota sells approximately 9.5m units worldwide. - $35bn US investment in electrification - 3.5m in BEV sales (approx. 40% of fleet) by 2030
Honda	By 2040, BEVs and FCEVs to make up 100% of sales in key markets - $46.3bn USD investment in research and development (including electrification) by 2026 - 40% of sales as EVs by 2030, 100% of sales in key markets as EVs/FCEVs by 2040
Nissan	By early 2030s, all new models in major markets to be electrified - $10bn USD investment in electrification by 2025 - 50% of sales as EVs by 2020 with 23 EV models on sale
Daimler (Mercedes-Benz)	By 2030, all new Mercedes-Benz models to be fully electrified - €40bn investment in electrification by 2026 - Establish guidelines to transition to all-electric within the next 10 years
General Motors	By 2030, cease sales of all new ICE vehicles - $35bn investment in electrification by 2025 - 100% of sales as EVs by 2035
Stellantis (Fiat, Peugeot, Chrysler, Citroen)	By 2030, BEV and PHEV to be 70% of sales in Europe, 40% of sales in the US - €30bn investment in electrification by 2025 - 5m BEV sales, up to 68% of sales by 2030 - BEVs to be 100% of sales in European market, 50% in US market
Volkswagen	By 2030, BEVs to be 70% of sales in European markets - $82bn USD investment in "future technologies" (including electrification) by 2025 - 60% BEV sales in the European market by 2030

Considering these conditions, Toyota needs to invest more seriously in shifting towards EVs, which will in turn protect corporate value for shareholders. Compared with policies and investment in Europe and the US, Toyota is clearly lagging behind.

3) Increasing climate-related action from shareholders

In May 2021, investment fund Engine No.1 achieved an unprecedented feat at the annual general meeting of US oil company Exxon Mobil. After continually demanding stronger climate action, Engine

[14] Based off data from "Japan and the global transition to zero emission vehicles" p.13-14 (May 10, 2022, Climate Group)

No. 1 replaced 2 of 4 external directors.[15]

Pressure is similarly increasing in the auto industry with calls for manufacturers to be more transparent about their carbon footprint. In the US, activist fund AsYouSow led other shareholders to demand that automakers reveal the true extent of their carbon emissions, and although the resolutions have not passed, their approval amongst shareholders is steadily growing.

Additionally, at the 2020 annual general meeting for Mizuho financial group, the first climate-related resolution to ever be filed at a Japanese financial institution was launched.

Company (location)	**Proposing shareholder (year)**	**Resolution details**	**Votes in favour**
Mizuho Financial Group (Japan)	Kiko Network (2020)	**Adding Paris-aligned investment strategies to the articles of incorporation**	34.5%[16] **→ "Strengthening our sustainability initiatives" announced April 2020**
Sumitomo Corporation (Japan)	Market Forces (2021)	**Adding Paris-aligned targets and business activities**	20%[17] **→ Revision to "Policies on Climate Change Issues" announced May 2021, February 2022**
Exxon Mobil (US)	Engine No.1 (2021)	**Strengthening climate change policies, and proposing 4 new external directors**	- % **(2 of the 4 external directors proposed by Engine No.1 were appointed)**
General Motors (US)	AsYouSow (2021)	Requesting the Board of Directors to issue a report, at reasonable expense and excluding confidential information, evaluating and disclosing if and how the company has met the criteria of the Executive Remuneration Indicator [of the Climate Action 100+ Net Zero Benchmark], or whether it intends to revise its policies to be fully responsive to such Indicator	15.70% [18]

[15] 米エクソン、物言う株主の取締役3人に　気候変動対応を重視 (June 3, 2021, Reuters)
[16] みずほFGへの株主提案の議決結果について (第2次集計）(January 22, 2021, Kiko Network)
[17] UPDATE: Sumitomo faces major rebuke from shareholders on climate inaction (January 21, 2022, Market Forces)
[18] Based on the "2021 Score Card" (Proxy Monitor)

		(At the time of filing, GM's GHG reduction targets were not linked to Executive Remuneration Indicators, in line with best governance practice for reducing climate risk. As executive remuneration is an effective method of achieving these metrics, investors can ensure that by displaying these indicators, management will set strategy in line with the Paris Agreement and implement effective strategies)	
Ford Motors (US)	AsYouSow (2018)	Requesting that Ford, with Board oversight, publish a report, at reasonable cost, describing whether and how our company's fleet GHG emissions through 2025 will increase given its planned change in fleet mix and industry's proposed weakening of CAFE (Corporate Average Fuel Economy) standards or, conversely, how it plans to retain emissions consistent with, or better than, CAFE standards to ensure its products are sustainable in a rapidly decarbonizing vehicle market.	12.71%
Volkswagen (Germany)	Swedish pension scheme AP7 and other shareholders (2022)	Requesting that Volkswagen reveal all direct and indirect climate lobbying activities, the industrial groups it is a member of, and the amounts paid to each industrial group[19]	-

4) Concerns about negative climate lobbying

In 2019, Toyota was criticized by investors for supporting the Trump administration in fighting against tighter emissions regulations proposed by the California state government. Under pressure from activists and investors, they revised their lobbying activities and said they would be more transparent with the measures they were taking. In response to Reuters, Danish pension fund Akademiker

[19] Investors push VW to reveal emissions lobbying (April 4, 2022, Clean Energy Wire)

Pension said that "this move must not be a PR exercise but instead signal a clear end to its role in negative climate lobbying which has given it a laggard status."[20]

Additionally, on the **CA100+ Automaker Rankings** by **InfluenceMap**, assessing corporate climate-related lobbying activities, Toyota is ranked second-lowest after Suzuki.[21]

CA100+ Automaker Ranking (InfluenceMap, May 2022)

Influencemap Performance Band	Organization	Engagement Intensity	Region
C	Volkswagen Group	51	Europe
C	Saic Motor	14	Asia
C-	Volvo Group	31	Europe
C-	Ford Motor	45	North America
C-	General Motors	43	North America
C-	PACCAR	6	North America
D+	Honda Motor	32	Asia
D+	Stellantis	31	Europe
D+	BMW Group	40	Europe
D+	Daimler	32	Europe
D+	Renault	25	Europe
D+	Nissan	26	Asia
D	Toyota Motor	32	Asia
E+	Suzuki	11	Asia

Towards a more ambitious action plan and sustainable future

Considering the close ties between climate risk and financial risk, Greenpeace believes that it is crucial for Toyota to align their business activities with the Paris Agreement, restricting global warming to an average temperature increase of 1.5℃. This applies not just to manufacturing, but to resources and the decarbonisation of the entire supply chain.

Looking towards realizing the growing EV shift and zero-carbon mobility, we must have mobility that is appropriate for each individual's needs. This means that in the long-term the number of personally-owned passenger vehicles will need to decrease, along with the introduction of a more efficient public transport system, greater options for car-sharing, and redesigning cities with space to encourage walking and traveling by bicycle.

As electrification speeds up worldwide, the slow pace of Japan's transition is becoming ever clearer. From a competition perspective, Toyota and Japan's leading automakers need to change their current course of action.

In order to achieve carbon neutrality by 2050, Japan's key industries need to chart a new way forward, and if the auto industry is to maintain its competitiveness globally, it must take the lead in rapidly shifting towards a low-carbon society.

[20] Toyota to review climate stance as investors turn up the heat (April 19, 2021, Reuters)
[21] CA+ Investor Hub Investor Resourses on Corporate Climate Engagement (2022, InfluenceMap)
The Climate Action 100+ (CA100+) database scores and analyses more than 350 companies and 150 industry groups worldwide. More information is available about their scoring and methodology.

All enquiries and comments are welcome, please feel free to contact us at the following.

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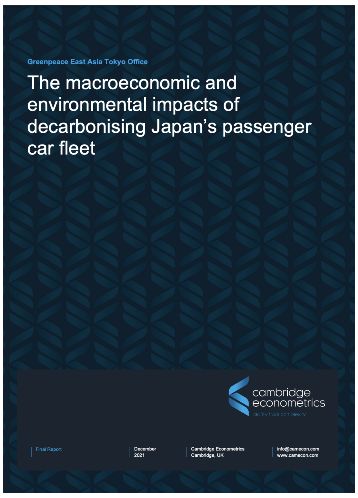
Auto-related publications and reports by Greenpeace

■ The macroeconomic and environmental effects of decarbonising Japan's passenger car fleet (2021/12/17)



Key findings

● By phasing out the sale of new ICE vehicles, including hybrids, by 2030, employment would grow by 29,000 jobs by 2030, and by 2050 employment would increase by 281,000 jobs with 1.1% GDP growth compared to 2021 levels.

● By 2050, oil imports would decrease by up to 4.9 billion barrels, a 99% decrease compared to 2021 levels. The increase in EV production would be accompanied by a lowering in production, purchase, and maintenance costs, leading to increased consumer spending, particularly in the services sector.

● Tailpipe emissions of pollutants such as particulate matter PM10 emissions and NOx emissions would be reduced by 99% between 2020 and 2050. By decreasing air pollution levels, the burden of disease from stroke, heart disease, lung cancer, and both chronic and acute respiratory diseases, including asthma, can be reduced.

Full report (PDF)
Report summary (PDF)

■ Auto Environmental Guide 2021 (2021/11/4)

Key findings: recommendations for automakers

● **Rapid phase-out of internal combustion engines**
By 2050 the transport sector needs to be completely decarbonized, as 99% of cars in use today operate on fossil fuels.

● **Supply chain decarbonization**
Particularly when charged by renewable energy, EVs play a key role in decarbonizing passenger transport. However EV production is also a large source of greenhouse gas emissions.

● **Resource circularity**
In shifting from fossil fuel to electric vehicles, the need for batteries and other electrical components will increase. As this heavily depends upon the extraction and processing of resources, it is crucial that automakers design systems that encourage the collection and reuse of materials, particularly those used in battery production, such as rare earth metals.

Full report (PDF)
Report summary

Disclaimer

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