ACCELERATING EAST ASIAN CORPORATE CLIMATE ACTIO

ANALYSIS OF CANON'S NEW 2030 TARGETS

Canon has lowered ambition to match weak action, but emissions forecasting shows original targets could be met with improved RE performance

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- Canon's new 2030 emissions reduction target has been lowered down from its original 50% commitment, to approximately 23% comparative emissions reduction. This decreased ambition is in line with Transition Asia's modelling that shows Canon will only achieve 27.8% emissions reduction by 2030 on its current growth path.
- A key issue is Canon's current RE target of only 4.9% for 2023, below industry peers, almost all of which have SBTi-approved 1.5°C targets and/or have committed to RE100.
- In order to achieve targets, Canon's focus on efficiency needs to change to a focus on RE procurement and lobbying for grid decarbonisation in its operational geographies, Japan and Southeast Asia, rather than undermining national progress via its own Canon Institute for Global Studies.

As Japan sweltered under its worst heat wave ever recorded¹ and the public and shareholders demand action, most corporate announcements on climate signal increased ambition. Canon's newly announced 2030 target does the opposite, reducing its ambition from 50% emissions reduction to approximately 23% emissions reduction when base year adjustments and limited Scope 3 ambition are taken into account.²

Base year	2008	2018
Scope 1 and 2 total	999 kt CO2e	1,091 kt CO2e
Scope 3 covered by the target	5,856 kt CO2e	6,436 kt CO2e
Reduction target	50%	30%
Resulting emissions in 2030 (kt CO2)	3,428 kt CO2e	5,268 Kt CO2e
Comparative emissions reduction when base year adjustments and all emissions scopes are taken into account	50%	~23%

Table 1 Comparison of Canon's original and updated reduction targets

The new target is well below Intergovernmental Panel on Climate Change (IPCC) recommendations for staying within 1.5 degrees Celsius (1.5°C).³ It is lower in ambition than many in Canon's peer group, reflective of weak action on grid decarbonisation and renewable energy (RE) procurement of just 4.34%.⁴ All of which should alert stakeholders concerned with climate and commercial risk.



This briefing provides a comprehensive assessment of Canon's climate ambition, action and the opportunities that would allow it to deliver the emissions reduction needed for 1.5°C alignment. It also demonstrates that despite having amongst the highest rates of corporate action commitments in the world, Japanese corporations in the consumer discretionary and technology sectors will struggle to live up to their commitments without also playing an active role in establishing policies, infrastructure and systems to decarbonise the electricity grid and accelerate the clean energy transition.

AMBITION DROPS TO MATCH WEAK ACTION

Until recently, Canon's CDP reporting included an absolute reduction target of 50% from 2008 to 2030^5 for Scope 1 and 2 and key categories of Scope 3. This target was in line with the IPCC recommendation of about 45% reduction from 2010 to 2030.⁶

Canon set this target in 2008 but continued with a business and sustainability strategy heavily focused on improving material, operational and product energy efficiency. While efficiency has a role to play, it cannot deliver the reductions required without decarbonising its operational model which is based on the Japanese power sector.

Transition Asia has modelled Canon's current and recent growth projections, efficiency achievements and energy consumption to forecast Canon's emissions trajectory from 2022 to 2030.⁷ The results indicate Canon would fail to meet the company's original stated target. Rather than adjusting its approach to address these issues, Canon appears to have lowered its ambition to match the current insufficient action.

Based on Canon's current actions it is likely to only achieve 27.6% reduction in operational (S1,2) emissions by 2030 compared to 2010. This is far short of the IPCC 1.5°C recommendation (around 45% reduction for the same period).

Full Scope 3 data is not publicly available for 2010 so it is not possible to make a direct 2010 IPCC comparison for Scope 1, 2 and 3 combined. However, it is possible to assess how the targets compare in terms of the resulting total emissions in 2030. Canon's original target would have resulted in Scope 1 and 2 and key Scope 3 category emissions totalling 3,428 Kt CO2 in 2030. The new target based on 30% reduction from 2018 would result in a total of 5,268 kt CO2 in 2030 for the same Scope categories. The new target is significantly less ambitious, even when taking merger and acquisition activities into account.⁸

Other more recent benchmarks also provide perspective on Canon's new combined (S1,2,3) target. The 2021 UNEP Emissions Gap report indicates the need to reduce emissions by 55% by 2030 to stay within 1.5°C.⁹ This is also broadly consistent with the MSCI assessment that listed companies need to cut their emissions by 8-10% per year¹⁰ to be 1.5°C compatible. Canon's recent targets equate to 2% per year reduction and would result in total emissions well above the MSCI 1.5°C assessment. The MSCI benchmark is applied to Canon's emissions trajectory in the graph below.

The new target is significantly less ambitious, even when new base years and merger and acquisition activities are taken into account.





Operational Model



Figure 1. Operational (S 1, 2) and Corporate (S 1, 2, 3) forecasts for Canon 2022-2030 emissions, with comparison to Canon's original and updated targets, IPCC and MSCI benchmarks where relevant.

Lowering ambition puts Canon at odds with its peer group. While Canon itself acknowledges the targets are not science-based, almost all of Canon's competitors in the photo and printing space have SBTi-approved 1.5°C targets.¹¹ In 2021 Fujifilm and Kyocera also updated their 2030 targets. They have a similar base year to Canon but greater ambition:

- Fujifilm with 50% reduction Scope 1,2,3 from 2019 to 2030¹²
- Kyocera with 46% reduction Scope 1,2,3 from 2019 to 2030¹³



Canon could achieve ambitious reduction and compete with peer group if the company improved RE ambition, procurement and climate policy engagement.

HOW CANON COULD DELIVER ON HIGHER AMBITION

Canon could match its peers and deliver on higher ambition if it took adequate action to address its fundamental decarbonisation challenge – efficiency drives (especially in Scope 3) do not transform its emissions profile fast enough. Canon needs both a more aggressive RE procurement strategy in key geographies and to actively demand the decarbonisation of grid electricity at utility and government levels. Only a combination of these will decarbonise Canon's operating and corporate emissions as demonstrated in the emissions modelling.

The emission trajectories within the analysis are based on key variables that forecast Canon's regional business growth, efficiency measures, energy consumption and RE growth to 2030, including:

- Revenue growth
- Efficiency rate year-on-year
- Energy intensity
- The emission factor of the grid in the country where electricity is being consumed
- The level of RE and its growth through power purchase agreements (PPAs) and captive power¹⁴

These are based on Canon's historical performance. Adjusting these variables, in particular the level of RE procurement and the grid emission factors by country, shows for example that:

- Companies with the majority of their energy consumption within Japan need the Japanese grid to decarbonise for their own emission factor to reduce Scope 2 emissions. Two-thirds of Canon's global electricity demand is in Japan.¹⁵
- Companies with expansion plans in Southeast Asia face increasing total emissions unless they improve their RE procurement as the grids in key countries in this region remain carbon intensive.

Canon could achieve the equivalent of the IPCC's recommended 45% emissions reduction, if:

- Canon ensured Japan successfully delivered on its strategic energy plan and decarbonised the grid to at least 250gC02/kWh¹⁶ by 2030; and
- Canon invested in RE PPAs or captive power to cover 35% of its electricity demand in Southeast Asia, approximately 135GWh of electricity.





GAP ANALYSIS AND RECOMMENDATIONS FOR CANON TO GET ONTO A 1.5 PATHWAY

Figure 2. Gap analysis and recommendation for Canon to get onto a 1.5°C pathway

250gC02/kWh is less than a linear forecast of IEA data for Japan which equates to 365gC02/kWh. It will require more than the 36-38% RE currently stated in the plan, as the nuclear energy percentage is unlikely to be achieved and additional RE will be required to close the gap.¹⁷ Corporate commitments to additional RE through PPAs and positive climate policy engagement are important to Japan's grid decarbonisation. However, Canon has only committed to a 4.9%¹⁸ RE target and instead of supporting positive policy engagement, the Canon Institute for Global Studies has released research opposing the expansion of renewables in Japan.¹⁹

Undermining RE and the pace of the energy transition not only reduces Canon's ability to hit its targets and undermines its competitiveness, it also impacts the many other businesses who risk not achieving their commitments if the Japanese grid is not decarbonised.

Canon could turn this around and be on track for 1.5°C alignment if it:

- Commits to a 2030 absolute emissions reduction target that is at least equivalent to 45% from 2010 (excluding offsets)
- Commits to a 100% RE commitment with at least 60% RE by 2030 and secure captive and PPA
- Develops and implements a 1.5°C-aligned climate policy engagement plan that includes active engagement on key 1.5°C-relevant regulation and RE policy, especially in Japan

A POINT-BY-POINT ASSESSMENT OF CANON'S CLIMATE AMBITION AND ACTION

In addition to the modelling, we have assessed Canon's overall climate ambition and action. Transition Asia sees ambition and action as a virtuous circle whereby high ambition sets the stage for impactful action, which in turn creates space for greater ambition. While most frameworks score companies on ambition, we believe action is a key measure of 2030 1.5°C alignment and therefore focus our assessment more heavily on action. Ambition without action is greenwash and will not reduce emissions.



Figure 3. The Transition Asia assessment of Canon's climate ambition and action.

Ambition		Score
2030 emission reduction ambition	Canon's new target of 30% absolute reduction in Scope 1, 2 and 3 from 2018 to 2030 reduces its ambition from 50% emissions reduction from 2008 to 2030 ²⁰ to approximately 23% when base year adjustments and different emissions scopes are taken into account. ²¹ Canon acknowledges the updated targets are not science-based. This puts Canon behind most of its peer group. Peer comparison: Fujitsu, HP, Kyocera, NEC Corporation, Nikon, Ricoh, Seiko Epson and Sony all have SBTi approved 1.5°C targets ²²	Low
RE target	Canon's only disclosed RE target is 4.9% for 2023. ²³ This puts its RE ambition far behind the 75 companies ²⁴ in Japan that have made RE100 commitments and Canon's global competitors. Peer comparison : Seiko Epson 100% by 2023, HP 100% by 2025, Sony 100% by 2030, Ricoh 50% by 2030/ 100% by 2050 ²⁵	Very Iow



Action		Score
RE procurement ²⁶	Canon's emissions factors are too high and its levels of RE are low and concentrated in a small number of countries - 4.34% RE use globally and 0.06% within Japan as a percentage of its total energy consumption. ²⁷ This puts its RE procurement behind many of its competitors.	Low
	Peer comparison procurement %: Sony 14.15% ²⁸ , Fujitsu 20.75% ²⁹ , Seiko Epson 48.89% ³⁰ , HP 53.46% ³¹	
	PPA peer example : Seiko Epson has almost 100% RE coming from PPAs with 35.4% of its total energy consumption delivered through PPAs. ³²	
Other emissions reduction	Canon has undertaken a number of efficiency measures related to its raw materials, operational sites, logistics and product efficiency and target these at the relevant emission sources. It has not outlined a clear plan for phasing out all carbon intensive infrastructure and products, nor made a clear commitment to reduce or eliminate fossil fuels from its operations. It has no clear policy on electrification.	Mod- erate
Supply chain	Canon has systems in place for active supply chain management and it includes supplier engagement into its strategy for improving per product emissions. But unlike many of its peers it has no stated plan for engaging with its suppliers on 100% RE commitments or setting science based targets and climate action plans.	Low
	Peer comparison: Although Apple is not a like for like peer, its 100% RE supply chain commitment shows a high standard is possible. ³³ Sony has a specific supplier engagement target focused on suppliers setting emission reduction targets equivalent to SBTI. ³⁴	
Climate policy engagement	Canon does not have a 1.5°C-aligned policy engagement plan and has not carried out any public positive climate engagement on key 1.5°C degree relevant government policy in Japan. Despite being a member of Japan Climate Initiative, ³⁶ Canon is not involved in active policy engagement and has not put forth any policy recommendations. ³⁶ The Canon Institute for Global Studies has produced an analysis speaking out against RE development in Japan. ³⁷	Very Iow
	Peer comparison: Some competitors of Canon such as Fujitsu and Ricoh are members of the Japan Climate Leaders Partnership (JCLP), a business coalition focused on decarbonisation. ³⁸ 53 Japanese companies including Fujifilm, Fusjitsu and Ricoh are members of RE100 ³⁹ and signed on to a RE100 letter to Japanese Prime Minister calling for increasing use of RE in 2021. ⁴⁰	

Emissions action and future likelihood	Transition Asia 2030 modelling suggests that on current strategies and actions, Canon will likely reduce its Scope 1 and 2 emissions by 27.6% from 2010. And Scope 1, 2 and 3 combined emissions by 27.2% from 2008. These are both less than 1.5°C and the Scope 1 and 2 target alone would not meet the SBTi criteria.	Low
Disclosure	Canon discloses all major emission sources including detailed information on Scope 1 and 2 and the most relevant Scope 3 emissions. ⁴¹	High
	Disclosure covers Canon's subsidiaries. Both location- and market- based accounting Scope 2 emissions are disclosed, but only the latter (lower value) is used for GHG emission totals. Canon discloses total energy consumption and provides breakdowns by energy type and geographic region. ⁴²	

DATA AND DISCLAIMERS

The methodology for the emissions modelling and the action circle are available in a supplementary paper.

The analysis is developed using Canon's sustainability report data, CDP reporting and disclosure via Bloomberg. This analysis is for informational purposes only and does not constitute investment advice, and should not be relied upon to make any investment decision. The briefing represents the authors' views and interpretations of publicly available information that is self-reported by the companies assessed. References are provided for company reporting but the authors did not seek to validate the public self-reported information provided by those companies. Therefore, the authors cannot guarantee the factual accuracy of all information presented in this briefing. The authors and Transition Asia expressly assume no liability for information used or published by third parties with reference to this report.

GLOSSARY

CDP	Formally the Carbon Disclosure Project
JCLP	Japan Climate Leaders Partnership, a business coalition in Japan
IPCC	Intergovernmental Panel on Climate Change
MSCI	An American financial/ESG rating agency
PPA	Power Purchase Agreement
RE	Renewable energy
RE100	A climate initiative aiming at 100% renewable energy use in business
SBTi	Science-Based Targets initiative
SEA	Southeast Asia
UNEP	United Nations Environment Programme



REFERENCES

- Canon's CDP response (2021) available at: <u>https://bit.ly/3U1vNQc</u>
- Canon's CDP response (2022) available at: https://bit.ly/3F1MDdh
- Canon intensity per unit approach (2022) available at: <u>https://global.canon/en/csr/report/pdf/canon-sus-2022-e.pdf</u>(English) <u>https://global.canon/ja/csr/report/pdf/canon-sus-2021-j.pdf</u>(Japanese)
- Canon Sustainability Report (2022) available at: <u>https://global.canon/en/csr/report/pdf/canon-sus-2022-e.pdf</u>(English) <u>https://global.canon/ja/csr/report/pdf/canon-sus-2022-j.pdf</u>(Japanese)
- Fujitsu's CDP response (2022) available at: <u>https://docs.google.com/document/d/1s_SCNT47acobuA90XPpP0-</u> <u>l10XDW0q2khnD8_aX2Lbw/edit</u>
- HP Inc.'s CDP response (2022) available at: <u>https://docs.google.com/document/d/1Sz0PuHUWzTN3v8Lj0o_</u> <u>Ju47ExBU0mEEcSZgJsa0E0ok/edit</u>
- IPCC 1.5°C degree recommendation (2016) available at: <u>https://www.ipcc.ch/site/</u> assets/uploads/sites/2/2019/06/SR15_Headline-statements.pdf
- Japan's 6th Strategic Energy Plan (2021) available at: <u>http://www.kantei.go.jp/jp/singi/ondanka/kaisai/dai47/sankou1.pdf</u> (Japanese)
- RE 100 committed member companies (2022) available at: <u>https://www.there100.org/</u> re100-members
- Seiko Epson's CDP response (2022) available at: <u>https://docs.google.com/document/d/1GTjdzemo5ulF5TXp0siNq7zNHb2TSUrH1amvc</u> <u>WN0A64/edit</u>
- Signatory letter to the Prime Minister of Japan (2021) available at: https://www.there100.org/sites/re100/files/2021-03/Japan%20Letter.pdf (English) https://japan-clp.jp/wp-content/uploads/2021/03/Climate-Group-20562-RE100-Letter-Japan-Japanese-2page.pdf (Japanese)
- Sony's CDP response (2022) available at: <u>https://docs.google.com/document/d/1B9KneZ9A5wCi2750i6TtXy8IfMBMNYekIhTEkZ</u> <u>li4ZE/edit</u>

ENDNOTES

- 1 https://www.bbc.com/japanese/61948408
- 2 Canon's CDP response (2021) available at: <u>https://bit.ly/3U1vNQc</u> Canon's CDP response (2022) available at: <u>https://bit.ly/3F1MDdh</u>
- 3 IPCC Summary for Policy Makers https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-re-port-on-global-warming-of-1-5c-approved-by-governments/#:~:text=Global%20net%20human%2Dcaused%20emissions,removing%20C02%20from%20the%20air.
- 4 Canon Sustainability Report 2022 https://global.canon/en/csr/report/pdf/canon-sus-2022-e.pdf pp. 130
- 5 Canon's CDP response (2021).
- 6 IPCC Summary for Policy Makers https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-re-port-on-global-warming-of-1-5c-approved-by-governments/#:~:text=Global%20net%20human%2Dcaused%20emissions,removing%20C02%20from%20the%20air.
- 7 Using Canon's sustainability report data, CDP reporting and disclosure via Bloomberg
- 8 In 2017 Canon acquired Canon Medical. In 2018 CDP reporting Canon described the resulting changes which represent 2.3% increase in Scope 1 and 2. As seen in Canon's CDP response (2018) available at: (<u>https://docs.google.com/document/d/1W-w061D70HwWh680CfZr3DmtMkVKcZl0w9_f00UK_eg8/e</u>)
- 9 https://www.unep.org/resources/emissions-gap-report-2021
- 10 <u>https://www.msci.com/research-and-insights/net-zero-tracker?utm_source=esg&utm_medium=email&utm_cam-paign=net-zero-newsletter-07-11</u>
- 11 Fujitsu, HP, Kyocera, NEC Corporation, Nikon, Ricoh, Seiko Epson and Sony all have SBTi approved 1.5°C targets
- 12 Fujifilm's CDP response (2022) available at: https://bit.ly/3V99idj
- 13 Kyocera's CDP response (2022) available at: https://bit.ly/3F4CgW7
- 14 A captive power plant is a facility that provides a localised source of power to an energy user
- 15 Canon Sustainability Report 2022 https://global.canon/en/csr/report/pdf/canon-sus-2022-e.pdf pp. 130
- 16 Japan's 6th Strategic Energy Plan (2021) available at: <u>http://www.kantei.go.jp/jp/singi/ondanka/kaisai/dai47/sankou1.pdf</u> (Japanese, pp.9)
- 17 Canon's CDP response (2022) link; 4.9% is rounded from the stated target of 4.85%.
- 18 Canon's submission to the CDP's Climate Change Questionnaire (2022)
- 19 Why the Expansion of Renewable Energy is Detrimental to Economic Recovery' <u>https://cigs.canon/article/20200701_6520</u>. html (Japanese)
- 20 Canon's CDP response (2021).
- 21 Canon's CDP response (2022).
- 22 https://sciencebasedtargets.org/companies-taking-action
- 23 Canon's CDP response (2022).
- 24 https://japan-clp.jp/climate/reoh#reoh_re100(Japanese)
- 25 https://www.there100.org/re100-members
- 26 RE procurement scoring is adjusted to the Japanese context where RE procurement is still more challenging than many other countries
- 27 Canon Sustainability Report 2022.
- 28 https://www.sony.com/en/SonyInfo/csr/library/reports/SustainabilityReport2022_E.pdf
- 29 Fujitsu's CDP response (2022)
- 30 Seiko Epson's CDP response (2022)
- 31 HP Inc.'s CDP response (2022)
- 32 Seiko Epson's CDP response (2022)
- 33 https://www.apple.com/newsroom/pdfs/Apple_Supplier_Clean_Energy_Program_Update_2022.pdf
- 34 Canon's CDP response (2022)
- 35 https://japanclimate.org/english/
- 36 Ibid.
- 37 Why the Expansion of Renewable Energy is Detrimental to Economic Recovery' <u>https://cigs.canon/article/20200701_6520.</u> <u>html</u>(Japanese)
- 38 https://japan-clp.jp/about/organization
- 39 https://www.there100.org/re100-members?items_per_page=All_
- 40 https://www.there100.org/sites/re100/files/2021-03/Japan%20Letter.pdf
- 41 Canon Sustainability Report (2022) available at: https://global.canon/en/csr/report/pdf/canon-sus-2022-e.pdf (English pp.57, 58) https://global.canon/ja/csr/report/pdf/canon-sus-2022-j.pdf (Japanese pp.57, 58)
- 42 Canon Sustainability Report (2022) available at: <u>https://global.canon/en/csr/report/pdf/canon-sus-2022-e.pdf</u> (English pp.130) <u>https://global.canon/ja/csr/report/pdf/canon-sus-2022-j.pdf</u> (Japanese pp.130)



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ABOUT TRANSITION ASIA

Founded in 2021, Transition Asia is a Hong Kong-based non-profit think tank that focuses on driving 1.5°C-aligned corporate climate action in East Asia through in-depth sectoral and policy analysis, investor insights, and strategic engagement. Transition Asia works with corporate, finance, and policy stakeholders across the globe to achieve transformative change for a net-zero, resilient future. Visit transitionasia.org or follow us @transitionasia to learn more.