English translation of our response to a consultation from Japan's Ministry of Economy, Trade and Industry on energy policy

EOS at Federated Hermes expectations for Climate change policy in Japan: Page 105, line 3567 Page 106, line 3588

Overview

In order to achieve the 1.5 °C target under the Paris Agreement, we believe that it is necessary to increase the proportion of renewable energy to about 50% and abolish coal fired power generation, including the high-efficiency plants unless equipped with CCUS, by 2030.

Reason

Climate change is the defining challenge of our time and we recognise the urgency to limit global average temperature increases to 1.5°C and decarbonise our society. The Intergovernmental Panel on Climate Change (IPCC) reported that 2020 was one of the three warmest years on record and the average global temperature in 2020 has already reached 1.2°C above the pre-industrial level. The latest IPCC report¹ on climate change released this August indicate that even under a very low emissions scenario, a global temperature rise of 1.5°C by 2040 and 1.6°C by 2060 is expected. Limiting global warming to 1.5°C by the end of the century is still possible but small-scale efforts will not be sufficient and rapid transformation is needed.

At the International Business of Federated Hermes (formerly Hermes Investment Management), we have established climate change expectations for ourselves and signed up to the Net Zero Asset Managers initiative and Powering Past Coal Alliance with a commitment to reach net-zero emissions alignment across our portfolios by 2050 and to accelerate the transition from coal power generation to clean energy.

We are concerned that under the proposed 6th Basic Energy Plan, thermal coal power generation still accounts for 19% of the generation mix in 2030. The International Energy Agency (IEA) states that to achieve net-zero emissions by 2050, unabated coal power needs to be phased out in advanced economies by 2030, and beyond 2021 there should be no new coal mines or mine extensions along with no new oil and gas field developments². The UN secretary general stated that the IPCC report is a "code red for humanity" and called for an end to new coal plants and new fossil fuel development. The upcoming COP26 in Scotland this year is also expected to focus on ceasing the use of coal, aiming to "consign coal to history"³.

To materialise the commitment that the Japanese government made to achieve net zero by 2050, which is essential for achieving the goals of the Paris Agreement, we urge the Japanese government to accelerate its coal phase out plan and transition all the coal generation capacity to clean energy by 2030. To achieve net zero emissions by 2050, the IEA estimates that renewable energy generation globally will need to reach over 60% in 2030 and 88% in 2050.

Having considered above, we urge you to revise the proposed energy generation mix to achieve at least 50% of renewable generation by 2030 in Japan and strongly ask to cease any coal power

¹ https://www.ipcc.ch/report/sixth-assessment-report-cycle/

² https://www.iea.org/reports/net-zero-by-2050

³ https://www.gov.uk/government/speeches/coal-power-should-be-consigned-to-history-to-keep-to-15-degrees

generation by 2030. If it is not possible to completely eliminate coal power generation, we expect that at least all of coal power generation facilities should be equipped with decarbonisation equipment such as CCUS.

Page 104, line 3520

Overview

Establish a target to reduce greenhouse gases by 50% or more by 2030 compared to 2013 level to meet the goal of Paris agreement to limit the temperature rise to 1.5°C.

Reason

We welcome the 46% reduction target announced in April this year which is a significant improvement over the previous 26% reduction target. We understand that 46% reduction target is generally considered to be consistent with Japanese government's goal of achieving carbon neutrality in 2050. However, a 46% reduction is not enough to achieve the 1.5° C target of the Paris Agreement, and we believe that reduction target beyond 46% is necessary.

The Climate Action Tracker points out that a 62% (compared to 2013) reduction is needed for Japan to align with the 1.5 ° C target of the Paris Agreement⁴, which the Climate Network and others has expressed support⁵. In addition, US, UK, and EU have revised their emission reduction target and aiming for a reduction of 50% or more, although the base year is different. Japan's reduction target remains less than 50% and we urge the government to increase the current target in order to achieve the 1.5 ° C target of the Paris Agreement.

In order to achieve significant emissions reductions by 2030, investment in electricity, transmission and distribution infrastructure needs to expand to accommodate a rapid increase in renewable energy supply. We believe this is especially important as a backup when the supply of nuclear power does not go as planned.

Page 123, line 4169 to 4181

Overview

Carbon pricing is an important tool for facilitating the transition from fossil fuels to renewable energy and we urge the Japanese government to introduce the system. We believe that carbon price in Japan should gradually raise the amount to 10,000 yen (100 US dollars) / t-CO₂ by 2030.

Reason

Carbon pricing includes a carbon tax that imposes a tax on CO₂ emissions and an emissions trading system that allows transactions by setting an upper limit on emission allowances. International organizations such as the United Nations and the OECD recommend that carbon pricing is an indispensable means of achieving economic decarbonization. The introduction of carbon pricing will promote energy saving, support transition to renewable energy, wane fossil fuel reliance, and lead to strengthening of industrial competitiveness, innovation and investment toward a decarbonized society.

The "High Level Committee Report on Carbon Prices" report released by the Carbon Pricing Leadership Coalition⁶ stated that carbon price consistent with the Paris Agreement is at least \$ 40-80

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⁴ https://climateactiontracker.org/documents/841/2021_03_CAT_1.5C-

⁵ https://www.kikonet.org/press-release-en/2021-04-22/climate-summit-2021

⁶ https://www.carbonpricingleadership.org/report-of-the-highlevel-commission-on-carbon-prices

(about 40,000 ~ 80,000) by 2020 and \$ 50-100 (about 5000 ~ 10000 yen) / t-CO₂ by 2030 is required to push the society to achieve the necessary levels of decarbonisation. In Japan, a "tax on global warming countermeasures" introduced in 2012 only adds 289 yen / t-CO₂ to existing fossil fuels tax. This tax rate is very low and inefficient to provide an emission reduction effect that is consistent with the Paris Agreement. In aggregate, it has been highlighted that tax on coal, which emits more CO₂ than oil has lower tax per emission, and it is necessary to remove coal's competitive advantage.

In 2018, OECD released the "Effective Carbon Rate 2018"⁷ report which analysed carbon pricing gap for OECD and G20 countries. It measured how much carbon pricing set by the countries falls short in line with a benchmark price of EUR30/t-CO₂. In this analysis, Japan has a carbon pricing gap of around 70%, indicating that emission mitigation efforts are not cost-effective or remain limited and relying on policies other than carbon pricing will likely to drive up the abatement cost, leading to companies missing out on capturing opportunities from the transition to a low carbon economy and facing higher transition risks.

According to the "Global Carbon Pricing Implementation Status" report released by the World Bank this year, a total of 64 countries and regions have introduced carbon pricing, including Europe, parts of the United States, South Korea and many other countries. Local governments are promoting CO₂ reduction through policies such as carbon taxes and emissions trading systems. The EU is preparing to introduce a carbon border adjustment mechanism, and China has introduced an emissions trading scheme at the national level. However, there is no nation-wide trading scheme in Japan - it only exists in Tokyo and Saitama prefecture which account for a very small level of emissions compared to Japan's national emission.

In order to achieve net zero goals consistent with the Paris Agreement, it is necessary to introduce a carbon tax, emissions trading system or both systems and to utilise them efficiently. In Japan, it is necessary to first revise the existing tax system and gradually introduce a carbon tax to bring about the effect of carbon pricing to society as a whole and to introduce an emissions trading system as needed.

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⁷ https://www.oecd-ilibrary.org/sites/9789264305304en/index.html?itemId=/content/publication/9789264305304-en