2022 年度 グローバル法学科

英 語

[自己推薦AO(A)] 14-J1

注 意

- 1. 監督者の合図があるまで問題冊子は開かないでください。
- 2. 解答はすべて解答用紙のきめられた箇所に記入してください。

I. 次の英文を読んで、文末の各問に答えなさい。

In his first policy speech to the Diet since taking office last month, Prime Minister Yoshihide Suga pledged to achieve zero emissions of greenhouse gases and realize a carbon-neutral society by 2050. It's a bold commitment, a stark contrast to his image as a staid and cautious politician. Achieving that goal will not be easy, but the objective is both smart and realizable.

Suga's speech has been applauded, but he was only aligning Japan with 120 other countries that have said that they too would achieve net-zero carbon dioxide emissions by 2050. His predecessor, Shinzo Abe, promised to reduce greenhouse gas emissions by 80% and reach carbon neutrality in the second half of this century. Suga was reportedly pushed to do more by Hiroshi Kajiyama, minister of economy, trade and industry, and Shinjiro Koizumi, the environment minister — the outward faces of Japan's energy and environmental policies — both of whom know well the diplomatic cost of their government's failure to lean forward on this issue.

As the world's third largest economy, Japan has huge energy needs. Domestic supplies are limited — the country produces just 9% of its needs — so it relies on imports of fossil fuels, oil and coal primarily, but also natural gas, to satiate that appetite. Japan hoped nuclear energy would reduce reliance on imports and those highly polluting fuels, but the 2011 Fukushima nuclear power plant accident forced the government to shelve those plans.

The Basic Energy Plan, formulated in 2018, aims to make renewable energy a "main power source" responsible for 22 to 24% of overall power output by 2030. That goal has been achieved: The International Energy Agency estimates that renewable energy accounted for 23.1% of Japan's total energy generation mix in the first half of 2020. Nuclear-power plans have not fared as well. While anticipated to meet 20 to 22%

of national needs by 2030, in 2019, nuclear plants produced just 7.5% of total power production.

Japan must commit more fully to renewable energy sources — some say that as much as 50% of the country's supply — if it is to honor Suga's commitments. It is possible. The amount of electricity generated by renewable sources during the first half of 2020 grew 20% from the previous year, but those gains must be qualified. The increase is partly a result of a slowing economy and a concomitant decline in energy consumption.

Genuine, sustainable progress depends on changing economic incentives for energy production and use. That effort has been initiated with the decision to end investment in the construction of new coal-fired thermal plants both in Japan and overseas. Credit international pressure for that change, although it is not clear if or when Japan will shutter existing plants. Suga promised to "drastically" transform the country's policy on coal-fired power. The Ministry of Economy, Trade and Industry (METI) is supposed to develop an action plan by the year end with deadlines for specific targets to reach zero emissions. That will include the development of hydro and hydrogen supplies.

The energy grid must be transformed. New modalities of power generation, delivery and storage are required. In addition to reducing the use of coal, the government is looking at solar, wind and hydrogen technologies. While cognizant of the public relations problems surrounding nuclear energy, the government is reluctant to reduce its commitment to that technology.

As important as changes to energy supply is a restructuring in energy demand. Production procedures must be changed across an array of industries. Steel production, for example, accounts for 47.6% of all industrial carbon dioxide emissions. Steel

manufacturers should replace blast furnaces to reduce their carbon emissions. One option is electric-arc furnaces; another is using hydrogen rather than coal derivatives as European companies are.

Automobile manufacturers need to better promote electric vehicles. Japan, a leading maker of electric vehicles worldwide, has had anemic sales at home. Efforts have focused on hybrid and hydrogen vehicles. There were 300,000 electric vehicles on the road in Japan at the end of 2019 — a little less than 1% of total market share. All industries must be attuned to ways that they can, in their operations and their products, reduce greenhouse gas emissions.

Much depends on the development of new technologies such as solar cells and storage capabilities (batteries), along with carbon recycling. There are signs of the needed transformation in Japanese thinking that sees changes not as problems but as possibilities. Green technologies are one of the most important opportunities businesses will have. Suga understands this moment. He argues that "We need to change our thinking and realize that structural changes in industry and society will lead to significant growth."

The Japanese government should set aggressive targets and promote the transition to a green economy with tax incentives and subsidies for research and development as well as investment. Funds have been set aside and pilot projects are underway, but the pace must accelerate. Zero emissions and creating a carbon neutral society will challenge Japan, but it is a challenge that must be met.

出典: The Japan Times Editorial Board, "Following the crowd, Suga makes a bold climate pledge," *The Japan Times*, October 29, 2020. Retrieved from https://www.japantimes.co.jp/opinion/2020/10/29/editorials/following-crowd-suga-makes-bold-climate-pledge/

注:zero emission 排出ゼロ,greenhouse gas 温室効果ガス,carbon-neutral society 脱炭素化社会,net-zero 実質ゼロ,carbon dioxide emissions 二酸化炭素排出量,fossil fuel 化石燃料,nuclear power plant 原子力発電所,coal-fired thermal plant 石炭火力発電所,electric vehicle 電気自動車,solar cell 太陽電池,subsidy 補助金

- 問1 下線部(1)はどのような目標であるのか、日本語で説明しなさい。
- 問2 下線部(2)をふまえて、日本はエネルギー需要をどのようにまかなっているか、日本 語で説明しなさい。
- 問3 下線部(3)をふまえて、日本は2018年に策定したエネルギー基本計画でどのような目標を掲げたか、またその達成状況はどうかについて、日本語で説明しなさい。
- 問4 下線部(4)をふまえて、日本は公約を履行するためにどのような施策を講じるべきか、日本語で説明しなさい。
- 問5 下線部(5), (6), (7), (8)を和訳しなさい。
- II. 「グローバル化した社会が抱えている問題を改善・克服していくために日々の生活でできること」について、 $80\sim100$ 語($80\sim100$ words)の英文で自分の考えを述べなさい。