

1-4 題：請將英文翻譯成中文：

1. As there is a direct relation between global average temperatures and the concentration of greenhouse gases in the atmosphere, the key for the solution to the climate change problem rests in decreasing the amount of emissions released into the atmosphere and in reducing the current concentration of carbon dioxide (CO₂) by enhancing sinks (e.g. increasing the area of forests). Efforts to reduce emissions and enhance sinks are referred to as "mitigation". (10 分)

2. Invasive Alien Species (IAS) are animals and plants that are introduced accidentally or deliberately into a natural environment where they are not normally found, with serious negative consequences for their new environment. They represent a major threat to native plants and animals in Europe, causing damage worth billions of Euros to the European economy every year. As invasive alien species do not respect borders, coordinated action at the European level will be more effective than individual actions at the Member State level.

The core of the IAS Regulation is the list of the invasive alien species. Three distinct types of measures are envisaged, which follow an internationally agreed hierarchical approach to combatting IAS:

- **Prevention:** a number of robust measures aimed at preventing the intentional or unintentional introduction of IAS of Union concern into the EU.
- **Early detection and rapid eradication:** Member States must put in place a surveillance system to detect the presence of IAS of Union concern as early as possible and take rapid eradication measures to prevent them from establishing.
- **Management:** some IAS of Union concern are already established in certain Member States. Concerted management action is needed to prevent them from spreading any further and to minimize the harm they cause. (20 分)

3. Three pathways involving forests and trees offer means by which societies, communities and individual landowners, users and managers can derive more tangible value from forests and trees while addressing environmental degradation, recovering from crises, preventing future pandemics, increasing resilience and transforming economies:

- 1). *Halting deforestation and maintaining forests* could avoid emitting 3.6 +/- 2 gigatonnes of carbon dioxide equivalent (GtCO₂e) per year between 2020 and 2050, including about 14 percent of what is needed up to 2030 to keep planetary warming below 1.5 °C, while safeguarding more than half the Earth's terrestrial biodiversity.
- 2). *Restoring degraded lands and expanding agroforestry* – 1.5 billion ha of degraded land would benefit from restoration, and increasing tree cover could boost agricultural productivity on another 1 billion ha. Restoring degraded land through afforestation and reforestation could cost-effectively take 0.9–1.5 GtCO₂e per year out of the atmosphere between 2020 and 2050.
- 3). *Sustainably using forests and building green value chains* would help meet future demand for materials – with global consumption of all natural resources expected to more than double from 92 billion tonnes 2017 to 190 billion tonnes in 2060 – and underpin sustainable economies.
- → **The three pathways are mutually reinforcing.** When synergies are maximized, the pathways can provide some of the highest returns in the form of climate and environmental benefits while also enhancing local sustainable development potential, adaptive capacity and resilience. (20 分)

4. **WOOD ENERGY AND NON-WOOD FOREST PRODUCTS PLAY MAJOR ROLES IN THE MAJORITY OF RURAL HOUSEHOLDS**
About 2.6 billion people rely on wood and other traditional fuels for household cooking. Woodfuel is a potentially renewable and carbon-neutral source of energy, and it undoubtedly has an important role to play in meeting future energy needs. But woodfuel also has significant negative impacts, especially in developing countries. Wood is an affordable fuel for those who lack access to other energy sources, but it takes time to collect and therefore often involves a tremendous opportunity cost, particularly for women. The extensive use of traditional woodfuel is a significant contributor to household air pollution, which is the third leading risk factor of global disease burden worldwide and is responsible for an estimated 1.63 million–3.12 million premature deaths per year. Woodfuel consumption could also pose a threat to the world's forests as a potential driver of deforestation and degradation. One-third of the global population (about 2.6 billion people) relied on traditional fuels such

見背面

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節次： 3

共 2 頁之第 2 頁

as wood, charcoal and agricultural residues for household cooking in 2019; biomass and charcoal combined accounted for about 88 percent of the traditional cooking fuels used in low- and middle-income countries in that year. If countries adopt only presently stated policies, nearly one-third of the global population will still not have transitioned to clean energy for cooking by 2030 and so will have to rely on the traditional use of woodfuel and other types of biomass energy. Reliance on woodfuel is highest in Africa (63 percent of households – more than 90 percent of all wood cut in Africa is used as woodfuel), followed by Asia and Oceania (38 percent) and Latin America and the Caribbean (15 percent).(20 分)

5. 英文名詞翻譯與解釋: (一題 5 分, 共 30 分)

- 1) Forest Carbon Sinks
- 2) Thinning
- 3) stock
- 4) Canopy closure(density)
- 5) Seed-bearer (forest)
- 6) Standing tree

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