

A Collective Action Plan to Promote Sustainable Growth and Uphold the Value of Coexistence

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*As the “creatures from planet Earth”, we aim to safeguard our planet from environmental harm. Our three-level analysis and recommendations will achieve the goal of coexisting with our neighbors and citizens of the world.

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Introduction

Climate refugees and resource disputes have strikingly increased due to the acceleration of climate change and subsequent natural disasters. The unprecedented shock prompted by the COVID-19 pandemic has made it exceptionally challenging for developing countries, whose industries are highly dependent on natural resources, to deal with the climate crisis. Since developing countries are deficient of technical resources necessary to safeguard themselves from upcoming crises, the severity of economic repercussions is immense compared to that of developed countries facing identical crises. In fact, climate change coupled with the COVID-19 pandemic has contributed to further disparities between the rich and poor. If the crisis is not dealt with adequate cross-border cooperation, the prolonged economic downturn will harm states on an unprecedented scale. The international community must prioritize in addressing the damage triggered by the pandemic and ongoing climate crisis. It must, however, ensure that its remedies are resilient to future climate impacts and contributory in resolving environmental issues over the long term.

The present proposal delineates three comprehensive recommendations to achieve the collective objective of promoting sustainable growth and upholding the value of coexistence on the system, state, and individual level. Competition and pursuit of economic goals are necessary yet should be reduced in times of crisis. Concessions should be made on all levels – the system, state, and individual – to enable the sustainable recovery from the COVID-19 pandemic and to pave the path for a vigorous future in which individuals can coexist with their domestic neighbors and citizens of the world.

Proposal 1: The Role of the International Community, a System-Level Analysis

For the international community to achieve sustainable development, individual states must cooperate and pursue collective goals over national interests. The transition to a “low-carbon society” would be an important global challenge. Low carbon economy, one of the top three megatrends, is a concept that aims to utilize renewable energy while reducing dependence on fossil energy, thus establishing a clean energy industry. Mitigation and adaptation are the two major ways in achieving the main objective: reducing CO₂ emissions to prevent temperature rise and taking measures to adapt to climate change. According to a journal published by the Science and Technology Policy Institute in Korea, a 1% rise in average global

temperature is expected even if greenhouse gas concentrations in the atmosphere are immediately stabilized. Thus, adaptation alone does not resolve the underlying problem. Additional efforts from the international community and national governments are required to curb greenhouse gas (GHG) emissions across sectors. Considering the poor infrastructure of developing countries and the necessity of energy technologies for GHG reduction, improving access to energy in run-down areas is also imperative.

Rising concerns on the effect of carbon and greenhouse gases in the atmosphere have urged the international society to examine and accumulate measures of mitigating climate change. Multilateral joint agreements, notably the Kyoto Protocol and the Paris Agreement for Climate Change, have been made in support of the shared interest to tackle environmental issues. Such commitments, which contain GHG emissions reduction targets, speaks volumes about how urgent the global warming and climate crisis is to the global society. Yet, despite current initiatives and cooperative efforts, the international community has not been able to fully address the subsequent consequences of the climate crisis. Unlike the clear and precise long term goals outlined under the CLEAN Future Act discussion draft Section 402 (i.e. specifying vehicle emissions standards for light-duty vehicles until 2030 and for heavy-duty vehicles until 2032), there have only been relatively vague agreements regarding the practical measures necessary to meet those standards.

A major problem that contributes to the ambiguity of the agreements is the lack of consensus on the sustainability and eco-friendliness of energy sources, including but not limited to misconceptions on natural gas. According to majority of articles, natural gas has been considered a “cleaner” fossil fuel since “it generates fewer carbon dioxide emissions than coal or oil” (Cara 2019). Nevertheless, methane, the main component of natural gas, is a greenhouse gas that contributes heavily to global warming. The impact of methane on the atmosphere is more severe than that of coal since methane is leaked during the process of natural gas extraction and production (2019). Developing states, however, have not only increasingly adopted the use of vehicles using liquefied natural gas and compressed natural gas but also implemented policies encouraging the utilization of alternative fuels (Nakata 2010). The cruel irony here is that developing states are retrofitting schemes only to aggravate the situation, which is detrimental for individual states and ultimately the international community. Thus, an additional consensus on whether to include natural gas as part of “recommendable emissions” is essential. This requires process of clearly specifying the expected threat posed by methane leaks, thereby making states fully aware of the downside of natural gas emission.

It is also necessary to reexamine and redesign the carbon emission trading scheme (ETS), a system outlined under the Kyoto Protocol as an effective method to allocate emission budgets to developing countries. The main principle of this scheme is simple; Carbon credits are issued to all states according to the reduction targets and if they go over the allowance of omissions, states are expected to purchase more credits. In practice, however, the ETS is considered problematic considering market economy principles: 1) carbon prices are either too low or too narrowly applied (Ball 2019), 2) the carbon pricing covers only 15% percent of global emissions, and 3) the current system imposes a burden on developing states. According to the World Economic Forum, the price of carbon is under \$10 per tonne in most sectors and this is insufficient to attract enterprises to bet in clean, renewable energy. Simply put, the “cap-and-trade system” is mistaken as a “permission to pollute” since paying the price is more cost-effective than investing in R&E. Moreover, the current measure exploits developing nations by adding the extra burden of putting the brakes on their potential for further growth.

To minimize the blind spots of ETS and to effectively slash carbon emissions, the international community should 1) support developing nations with “CCS (carbon capture and storage)” technology, and 2) include more emissions subject to regulation. Since developing countries lack technologies to mitigate emissions, CCS technology should be introduced. CCS would help developing countries to “scale up renewable power from a tiny base” (Ball 2019). Furthermore, a definite clause regarding emissions should be arranged. In Europe, only dozens of agencies utilize direct regulation methods to regulate all kinds of emissions while majority only covers about half of the emissions that serve as main agents of global warming. Even the United States focuses more on “stealthy regulatory policies” (Victor 2009) such as providing subsidies for low-emission technologies and mandates for energy efficiency rather than substantially regulating emissions. Thus, the international community should specify emission standards and enhance the level of policy coordination. A common analysis of the environmental crisis must be established to facilitate concrete policymaking on an international level.

Proposal 2: The Role of National Government and Conglomerates, a State-Level Analysis

It is of utmost importance for not only the international community but also individual states to procure measures to create a sustainable world. For a state to connect and empower individuals so that it can foster sustainable development, it must design solutions that adequately tackle the aggravating issues of air pollution, litter, and water pollution triggered by economic growth oriented development policies. Especially in times of the COVID-19

pandemic, states must promote innovative initiatives that engender a balance between economic growth and environmental preservation, upholding the value of coexistence. Simply put, the role of state governments and conglomerates are vital for shaping societies in which individuals can coexist with their domestic neighbors and citizens of the international community.

Air pollution, like COVID-19, is of transboundary nature, rendering cooperation between domestic communities critical. Since all Korean citizens are the direct stakeholders of such environmental destruction, the Korean government should prioritize active engagement and investment in its automotive industry to improve air quality and safeguard public health. Although the government has laid out strategic plans to resolve the dual crises of energy and climate change since 2008 (Yun 2010), low-carbon green-growth (LCGG) has yet to become its national development paradigm as emissions of CO₂ and other air pollutants from conventional vehicles are still one of the most significant causes of fine particulate pollution within Korea (CACC 2019). Tightening exhaust emission standards may be one method to settle the problem. Nevertheless, strict regulations often act as a burden on corporations, cutting profits to an extent that make it difficult for them to survive in the market. Thus, the government must provide more incentives to automotive companies for them to ultimately optimize their portfolio and maximize efficiency, producing more eco-friendly vehicles (European Environment Agency 2019). In other words, sufficient R&D investment in elective vehicle (EV) production along with fund provision to exemplary automotive companies are imperative to creating a win-win relationship between the economy and environment. It is crucial to prioritize sustainable development but the growth of domestic corporations must not be hindered. On another note, to incentivize more consumers to purchase EVs, the government should reinforce the existing subsidy policy and provide monthly funds for the first three or four years after the purchase of EVs. The Korean government should also invest in infrastructure expansion as the increase in the number of electric charging stations will ensure convenient EV usage across the country. The mitigation of air pollution will allow not only the enhancement of quality of life but also the coexistence of Korean citizens and foreign citizens, fostering sustainable growth around the globe.

The role of conglomerates in Korea is as significant as that of its national government. Conglomerates are major players in the global economy that are massive in terms of their budget and the magnitude of their economic and cultural impact over the domestic and international community is evident. Thus, it is essential for the conglomerates of Korea to

engage in meaningful partnerships with international organizations and to promote corporate social responsibility for sustainable development. In fact, corporations such as POSCO, SK Group, and Hyundai Kia Motors have carried out an array of campaigns under the goal of triggering sustainable growth (Kim 2019). Limitations, however, exist that corporations hardly prioritize environment conservation over profit, thus making the impact of CSR activities minimal (Yun 2010). Thus, the major conglomerates must modify and reinforce their current CSR projects and realize that short-term losses are inevitable to pursue the long-term goal of crafting a sustainable, eco-friendly society in which individuals can enjoy high quality of life.

Proposal 3 : The Role of Individuals, an Individual-Level Analysis

System and state level action plans to secure environmental preservation is crucial, but it remains valid only with widespread public awareness of the corresponding issue. On an individual level, low-carbon food diet, among the measures for environmental education and enhancement of public awareness, is an effective way to reduce carbon footprint. According to the 2006 Food and Agriculture Organization of the United Nations (FAO) statistics, a one-pound cut in the meat consumption is equivalent to 36.4 pounds of CO₂ emission reduction (Lin 2014). By practicing a low carbon diet on a daily basis, the GHG emissions released from “production, packaging, processing, transport, preparation, and waste of food” (2014) can be minimized, playing a significant role in mitigating the environmental crisis. Thus, it is essential for individuals to start a “plant-rich” diet and practice environmental veganism. They should consume fruit, vegetables, and unprocessed foods, and reduce the intake of trans-fats in beef, lamb, milk and cheese (WHO, 2020). Individuals must be aware of the remarkable interconnectivity between dietary and environmental protection. They should promote healthy diets in addition to adopting eco-friendly habits of recycling and minimizing use of resources.

Conclusion

To promote sustainable development and uphold the value of coexistence, there must be cohesive, coherent, and strategic action plans on all levels – the system, state, and individual. The aforementioned measures in which we can uphold global citizenship and tackle COVID-19, ultimately ensuring sustainable growth and achievement of global environment and health goals, are intricately interlinked. Thus, it is difficult to define the way to coexist with our neighbors and citizens of the world either as a top-down or bottom-up process. For us to coexist not only within our neighborhoods but also within the global society, we must cooperate on different levels. The proposals will eventually create a synergy effect, facilitating eco-friendly development and securing a sustainable future in which we can coexist.

Bibliography

- Ball, Jeffery. "Why Carbon Pricing Isn't Working: Good Idea in Theory, Failing in Practice." *Foreign Affairs (New York, N.Y.)*, vol.97 (4), 2018, pp.134-146.
- Cara, Daggett. "Fight or Switch? How the low-carbon transition is disrupting fossil fuel politics." *Rochester Business Journal*, vol.35 (35), 2019, pp.26-27.
- Climate and Clean Air Coalition (CCAC). "25 Clean Air Measures for Asia and the Pacific." *United Nations Environment Programme, Asia Pacific Clean Air Partnership*, 2019.
- European Environment Agency. "Fiscal Instruments Favouring Electric Over Conventional Cars are Greener", 2019, <https://www.eea.europa.eu/publications/fiscal-instruments-favouring-electric-over/download>
- Kim, Jeehee. "[Sustainable Future] Firms Learn That Doing Well Means Doing Good." *Korea JoongAng Daily*, 16 Oct. 2019, koreajoongangdaily.joins.com/2019/10/16/industry/Sustainable-Future-Firms-learn-that-doing-well-means-doing-good/3069133.html.
- Lin, Yu-Ling and Lin, Hong-Wen. "Have You Switched to a Low-Carbon Diet? The Ultimate Value of Low-Carbon Consumerism." *Administrative Sciences*, vol.4 (2), 2014, pp.105-119.
- Nakata, Toshihiko et al. "Application of energy system models for designing a low-carbon society." *Progress in energy and combustion science*, vol.37 (4), 2011, pp.462-502.
- Richstein, Jorn C. et al. "The market (in-)stability reserve for EU carbon emission trading: Why it might fail and how to improve it." *Utilities policy*, vol.35, 2015, pp.1-18.
- Schultz, Kai. "South Asia is Smothered in Toxic Air, Report Finds", *The New York Times*, 2019, <https://www.nytimes.com/2019/08/27/well/live/air-pollutiondeaths.html?searchResultPosition=1>
- Victor, David. "The Problem with Cap and Trade." *MIT Technology Review*. 2009, <https://www.technologyreview.com/2009/06/23/211965/the-problem-with-cap-and-trade/>
- WHO. <https://www.who.int/news-room/fact-sheets/detail/healthy-diet>
- Yun, Sun-Jin. "Not So Green: A Critique of South Korea's Growth Strategy." *Global Asia*, June 2010, www.globalasia.org/v5no2/feature/not-so-green-a-critique-of-south-koreas-growth-strategy-sun-jin-yun.