Climate Pledges: The Need for Greater Transparency

Emissions reduction pledges made to date by signatories to the Paris Agreement lack concrete strategies to implement targets and those by non-industrial parties have been mostly relative in nature, measured against a variety of indicators (such as GDP). **Yamaguchi Mitsutsune**, special advisor to the Research Institute of Innovative Technologies for the Earth (RITE), argues that what is needed as a next step is greater transparency of fundamental data including evidence of policy efforts to meet stated targets.

The Paris Agreement was adopted at COP21 in December 2015, and went into effect in November the following year. The Paris Agreement comprises two elements. The first is a long-term top-down approach to hold the increase in the global temperature to below 2°C above pre-industrial levels (and to 1.5°C if possible); the second is Nationally Determined Contributions (pledges), which are non-binding short-term (basically by the year 2030) reduction targets to be pursued on an autonomous basis by Agreement signatories. Towards achieving its long-term targets, the Agreement also lays out provisions related to attaining a balance between greenhouse gas (GHG) emissions and absorption in the second half of this century. However, much literature on the subject has pointed out that there is a large gap between the bottom-up approach involving pledges made by each country and the 2°C target, and that, with pledges being implemented, the global temperature will rise to more than 3°C above pre-industrial levels by 2100.

A look at the pledges made by each country reveals endless variety in the details. While developed nations have cited absolute values for their reduction targets, other countries with a few exceptions such as Brazil have set relative targets. Countries such as China and India have pegged CO_2 emissions intensity to GDP, and South Korea and Mexico have adopted reduction relative to BAU (business as usual) levels. It is unclear what 2030 emissions will look like even if those countries that have not set absolute targets fulfill their pledges, because emissions will depend on GDP and BAU emissions levels. Moreover, some developing countries have set their targets on the condition of receiving various support from developed countries, adding another uncertain factor. Additionally, most of the policies authored to achieve these pledges simply enumerate the policies without describing their respective effects. The pledges made by six major countries have been compiled into **Table 1** for comparative purposes.

Comparative Efforts

Amid these developments, a focal point of future international negotiations will be how far the international community can go in narrowing the gap between these pledges and the 2°C

Table 1: Comparison of Pledges Made by Major Countries

Country	GHG Emissions (UNFCCC Data) (Mt, 2015, excluding LULUCF)	Pledge		Transparency
		Target	Consistency with 2 degree target	Policies / measures
Annex I				
USA	6,587	26-28% below 2005 levels in 2025	○	Yes, however, no corresponding emissions reduction figures are found.
EU	4,308	40% reduction 1990 levels by 2030	○	Yes, however, no corresponding emissions reduction figures are found.
Japan	1,323	26% below 2013 levels by 2030	○	Yes, with expected reductions by mainly technological improvement.
Non Annex I				
China	11,896 (2012)	To lower carbon dioxide emissions per unit of GDP by 60% to 65% from the 2005 level; To increase the share of non-fossil fuels in primary energy consumption to around 20%.	—	Yes. Stated abstractly by sectors such as energy, industries, transportation, building, and ETS.
India	2,101 (2010)	To reduce the emissions intensity of its GDP by 33% - 35% by 2030 from 2005 level. (Conditional)	—	Yes. Detailed policies on clean energy, energy saving etc., without mentioning concrete figures. Also stress the coherence with SDGs.
Brazil	985 (2012)	Unconditional 37% below 2005 levels in 2025. Further reduction may be possible with support from other countries.	○	Consistent with the 2°C temperature goal. 18% by 2030, by expanding biofuel consumption. Zero illegal deforestation by 2030. Achieving 45% of renewables in the energy mix by 2030.

target. Specifically, at the Facilitative Dialogue (Talanoa Dialogue) to be held in the lead-up to COP24 in December 2018 and at Global Stocktakes to be held every five years from 2023 onwards, discussions over the strengthening of pledges are expected to advance, but these discussions will likely center on ensuring Comparative Efforts between member nations. This is because if each member nation feels that its own targets are stricter than those of others, it will demand that those nations institute further reductions. Traditionally, developed countries have been obligated to implement stricter reductions compared with developing countries under the principle of Common but Differentiated Responsibility (CBDR). Even the Paris Agreement has language calling upon all countries to work to achieve their targets while considering CBDR and Equity on the way to achieving the 2°C target. How, then, should Comparative Effort be gauged in light of these various aspects? On this point, views are largely divided into two categories: evaluating countries' efforts based on the standard of equity, or evaluating them from a cost standpoint.

The former abstract concept of equity is further divided into categories such as responsibility (past emissions), equity (per capita emissions) and capacity (to pay). This is an attempt to calculate fair effort sharing (burden sharing) of member states based on these metrics. This approach is characterized by the effort to develop global emissions pathways to meet targets (such as the 2°C target) at the least cost, then allocate global emissions to each party based on the equity principle, and thereafter, by comparing gaps between allocated emissions and actual pledges, attempt to make their pledges more ambitious. However, this approach seeks to determine everything from a top-down perspective, from the setting of targets to the reduction targets of each country to that end. This conflicts with the Paris Agreement that sets the 2°C target through pledges that are not legally binding (bottom-up approach).

The latter is an approach that seeks to illustrate the efforts of countries through the costs involved with reduction. It will be also true that equal reduction costs based on per-capita GDP meets the equity standard. Another idea is to make the cost of one additional unit of carbon (the marginal abatement cost) equal. However, doing so makes it necessary to calculate costs using a model, and a major problem is that there can be significant differences in the results depending on the model that is used.

Introducing Transparency in Pledges

As is quite clear from the discussions that have taken place to date, it is not possible to evaluate the comparative effort of each country's pledges based on a single indicator. For this reason, the first step will be to publish per-country evaluations based on a wide variety of indicators such as equity and costs, and to solicit comments from the countries subject to evaluation.

In conjunction with these efforts, the pledges made by each country need to be transparent. Specifically, this means asking the countries that have targeted reductions in relation to BAU levels (Mexico and Indonesia, for instance) to present BAU levels leading up to the target year and the basis for such calculations, and asking the countries that have set targets for improved carbon intensity (China and India, for example) to specify their GDP and GHG emissions in the lead up to the target year.

The next step will be to ask major countries such as G20 nations to clearly state evidence of their policies to meet the targets (the reductions needed to meet the targets and a breakdown showing through which policies the emissions will be reduced). If this fundamental data can be assembled, expert groups will be able to develop objective assessments to a considerably high degree of accuracy by performing detailed examinations of the basis for each policy. Based on this, expert groups and the relevant countries will get close to a conclusion on the finer details through dialogue. These processes will reveal carbon prices in affected countries, which are directly linked with international competitiveness. This could be a big plus for the countries under review.

Also, it will be beneficial for each country, through the above processes, to review whether its own pledges are truly feasible. There may be cases in which the current pledges were submitted based on superficial comparisons with other countries or attractiveness. In those cases, there will be a slew of cases where the greater the transparency in a country's pledge, the more difficult it is to achieve. Under this situation, if parties adopt the rigid stance of not accepting any revision toward less ambitious targets at all, countries which cannot achieve the target could be driven from the Agreement, placing the very continuation of the Paris Agreement in jeopardy.

There is another important point that relates to the transparency of pledges. That is how the pledges conform to the 2°C (or 1.5°C) target. Article 3 of the Paris Agreement calls upon countries to submit pledges from the perspective of meeting this target, and actually in addition to many developed countries, many developing countries such as Brazil, South Korea and Indonesia have claimed that their pledges conform to the 2°C target. Perhaps each country should be asked to explain their reasoning. The aim behind this would be to inform the politicians in each country of the real meaning behind the 2°C target.

As we seek greater transparency in pledges, contradictions in the pledges may come to the fore. However, what is important here is not coercing conformity, but taking another hard look at what is immediately before us. By doing this, we will be able to preserve the valuable framework we have obtained (Paris Agreement), which involves the participation of all parties, and ensure its long-term efficacy.

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