



NDC TRANSPARENCY CHECK



SOUTH KOREA

MAKING SOUTH KOREA'S NDC MORE TRANSPARENT

December 2020



CONTENTS

1	INTRODUCTION TO THE 'NDC TRANSPARENCY CHECK'
2	SUMMARY AND RECOMMENDATIONS
3	DETAILED ASSESSMENT

The NDC Transparency Check provides recommendations on what information countries should provide in their 2020 NDC Update to ensure its clarity, transparency, and understanding.

This is done by evaluating existing NDCs and assessing the information provided the annex of 4/CMA.1 under Article 4.8. of the Paris Agreement, to come up with clear and practical recommendation on which information should be included in the 2020 NDC Update in order to be in full conformance with international agreements.



INTRODUCTION TO THE 'NDC TRANSPARENCY CHECK'

The Paris Agreement was adopted in 2015 at the 21st United Nations Framework Convention on Climate Change Conference of Parties (UNFCCC COP 21), and came into force a year later. Almost all countries are currently signatories of the Agreement¹.

The objective of the NDC Transparency Check is to provide a robust reference to assess whether Parties have communicated their mitigation efforts through Nationally Determined Contribution (NDCs) that are clear, transparent and understandable, in terms of the requirements set out in the Paris Agreement, its accompanying decision (1/CP.21) and Annex I to decision 4/CMA.1, which sets out the "information to facilitate clarity, transparency and understanding of nationally determined contributions".

Legally, the Annex is only binding from the second NDC onwards. However, Parties are "strongly encouraged" to apply the Annex to updated NDCs, due 2020.

While the approach taken for this assessment is based on conformance with the Annex, this 'NDC Transparency Check' aims to assess both:

- i. Conformance of a country's NDC with the Katowice Rule Book, and;
- ii. The extent to which a country has provided additional information in relation to each element of the Annex which enhances clarity, transparency and understanding.

The government of South Korea will be revising the existing NDC to update its commitment in relation to the Paris Agreement's long-term goals, under the country's specific circumstances.

The NDC Transparency Check aims to provide information to support the NDC revision process, by identifying gaps in the information provided in previous NDCs on the South Korea's mitigation goals and their underlying policies and measures that is needed for clarity, transparency and understanding, and useful to provide greater clarity on the likely outcome of NDCs collectively.

The detailed methodology as well as other assessment are available on: **www.climate-transparency.org**



¹ A possible exception is the United States of America, which is currently a signatory, but has started the withdrawal process from the Agreement, and is expected to withdraw formally in November 2020. Yet, president-elect Joe Biden announced that under his presidency the US will re-join the Paris Agreement.

02

SUMMARY AND RECOMMENDATIONS

In October, President Moon Jae-in made a pledge for South Korea to go carbon-neutral by 2050. On November 27, during an interministerial meeting on 2050 carbon neutrality strategy, President Moon announced plans to enhance Korea's NDC by the end of his administration in May 2022. The government is still planning to submit an update of its NDC in December 2020 which is expected not to include a more ambitious target.

It has indicated that the updated NDC will be based on historical emission instead of "Business-As-Usual" estimation, while maintaining the GHG emission target for 2030. The government points to South Korea's heavy reliance on carbon-intensive industry as the most important challenges for meeting the current target. The increase in new coal power plants, especially the 7,000 MW under construction, is one of the most important reasons of lack of ambition. The President's announcement to enhance the NDC, may lead to actual discussions in 2021, on cancelling some new coal power plants under construction, reducing the life period of existing coal power plants and enhancing the 2030 renewable energy target.

The South Korean government plans to use carbon credits from international market mechanisms and carbon sinks in the land use, for which the rules have not been finalized under the Paris Agreement.

South Korea's current NDC target: 37% reduction from 2030 BAU (536 MtCO₃eq by 2030).

The NDC target needs to be communicated in a clear and understandable way in order to ensure clarity, transparency and understanding of the NDC. The South Korean Government has already indicated that the updated NDC may include more details on carbon sink and implementation period. This is a good first step, but more would be needed.

This assessment provides a detailed analysis of the existing NDC and highlights the opportunities for a transparent and enhanced updated NDC, based on the requirements set out in the Paris Agreement.

From a political perspective, South Korea's leadership is more important than ever. By raising its target in the updated NDC and increasing its transparency, South Korea would send an important signal to other big emitters, would underline its position as an important international player and would set an example for other countries.

South Korea's current NDC target



An assessment of the NDC target can be found in the Climate Transparency Report: **www.climate-transparency.org**A detailed analysis is provided by the Climate Action Tracker: **www.climateactiontracker.org**

To enhance the transparency of its 2020 NDC Update, South Korea should implement the following key recommendations (further information on the recommendations can be drawn from the detailed assessment below):

IC	TU Category	Current NDC	Room for improvements for NDC Update 2020
	Reference point	 The NDC contains the information that the source of the BAU trajectory is the BAU projection of The scenario is based on the BAU projection of KEEI-EGMS (the Korea Energy Economics Institute Energy and GHG Modelling System), but no references or further information is provided. The NDC contains no information on whether or how the BAU trajectory may be updated. 	Provide information on whether or how the BAU trajectory may be updated.
eeee	Time frame	 Target is for the year 2030, so the timeframe is implied (ten years) but not stated, and the period of implementation is not stated. Implied single year target, but information not explicitly provided. 	 State timeframe and period of implementation. Provide explicit reference on whether the NDC is a single-year or multi-year target.
	Scope and Coverage	The Korean NDC covers six gases, and all sectors other than LULUCF. The inclusion of LULUCF will be decided "at a later date". No information is included as to how this will be accounted for, and which categories will be included if it is.	In case LULUCF not included in the NDC Update, provide information explanation for not including LULUCF.
	Planning process	 Some information was provided on domestic institutional arrangements and the NDC process, and limited information was provided on public participation. No information was provided on stakeholder consultations with local communities, indigenous peoples, and/or whether the NDC process was conducted in a gender-responsive manner. No information is provided on national circumstances, but some information is provided on experiences developing the NDC. 	 Provide detailed information on domestic institutional arrangements and the NDC process, incl. public participation and stakeholder consultations. Provide information on national circumstances.

IC	TU Category	Current NDC	Room for improvements for NDC Update 2020
Assumptions, and methodological approaches		 No information provided on how South Korea will account for its NDC. It is implied but not stated that an inventory-based approach will be used, and since the land sector is currently not included, no information is provided on accounting for the land sector. It is implied but not stated that Korea will use an inventory-based approach. 	Provide detailed information on how South Korea will account for its NDC, incl. detailed information on whether / how South Korea will use an inventory approach.
	Fairness and ambition	Korea observes that it has "set a fair and ambitious target to the extent possible" but does not provide any grounds for why its targets should be considered fair and ambitious.	Provide detailed grounds for why the country considers its targets fair and ambitious.
Contribution to UNFCCC Article 2		 No reference to Article 2 of the Convention. The South Korean NDC contains a reference to the 2030 goal "expected to be in line with" recommendations for global emissions reductions by 2050 from the IPCC's AR5, but no specific linkage to either Article 2.1.a or 4.1 of the Paris Agreement 	Provide details on how the NDC contributes to Article 2.



DETAILED ASSESSMENT

Note: The following assessment has been done on the basis of the Annex to 4/CMA.1, but it needs to be noted that South Korea's NDC assessed below was submitted before the Annex was agreed.

The NDC assessed is South Korea's NDC as contained in the UNFCCC's interim NDC registry, as submitted on 3 October 2016 (https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Democratic%20People's%20Republic%20of%20Korea%20First/DPRK-INDC%20 by%202030.pdf) and updated on 19 September 2019: https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Democratic%20 People's%20Republic%20of%20Korea%20First/2019.09.19_DPRK%20letter%20to%20SG%20Special%20envoy%20for%20NDC.pdf

Element of ICTU	Included in NDC	Category of assessment	Information in NDC and assessment		
1. Quantifiable information on the reference point (including, as appropriate, a base year):					
(a) reference year(s), base year(s), reference period(s) or other starting point(s)	Yes Partly No n/a	 Reference year(s) – including for reduction against a baseline Base year(s) Reference period(s) other starting point(s) 	The Republic of Korea's (henceforth Korea) NDC has a target of reducing GHG emissions in relation to a BAU trajectory by 37% by 2030.		
 (b) Quantifiable information on the reference indicators, their values in the reference year(s), base year(s), reference period(s) or other starting point(s), and, as applicable, in the target year; (If 1 (c) is completed, this is not applicable) 	Yes Partly No n/a	 Quantified – in CO₂ or CO₂-eq or in other emissions units Quantified – other units Quantifiable information provided – to quantify in CO₂ or CO₂-eq Quantifiable information provided – to quantify in other units No quantifiable information 	Korea's NDC provides BAU values for 2020, 2025 and 2030 (850.6 Mt CO ₂ -eq).		
(c) For strategies, plans and actions referred to in Article 4, paragraph 6, of the Paris Agreement, or polices and measures as components of nationally determined contributions where paragraph 1(b) above is not applicable, Parties to provide other relevant information; (If 1(b) is completed, this is not applicable, unless a country has provided policies and measures as well)	Yes Partly No n/a	 The country has provided reference points for relevant quantified goals for specific PAMs. The country has provided reference point for qualitative goals for PAMs with non-quantified goals. 	Not applicable.		
(d) Target relative to the reference indicator, expressed numerically, for example in percentage or amount of reduction;	Yes No n/a	 % reduction from base year % reduction from BAU % intensity reduction from base year Other 	37% reduction in 2030 compared to BAU.		
(e) Information on sources of data used in quantifying the reference point(s);	Yes Partly No n/a	Source: GHG inventory Reference to underlying data sources Other studies Enhanced conformance – traceability: Source readily found	The NDC contains the information that the source of the BAU trajectory is the BAU projection of The scenario is based on the BAU projection of KEEI-EGMS (the Korea Energy Economics Institute Energy and GHG Modelling System), but no references or further information is provided.		

Element of ICTU	Included in NDC	Category of assessment	Information in NDC and assessment
(f) Information on the circumstances under which the Party may update the values of the reference indicators.	Yes No n/a	GHG inventory: How values may be updated When Baseline projections: Information on whether the baseline will be updated, when and why. Intensity: If, whether and how the country will update its intensity reference indicator.	The NDC contains no information on whether or how the BAU trajectory may be updated.
2. Time frames and/or period	s for implemen	tation:	
(a) Time frame and/or period for implementation, including start and end date, consistent with any further relevant decision adopted by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA);	Yes Partly No	 Stated time frame of 5 years Stated time frame of 10 years Other stated time frame Start date: 2021 End date: 2030 	Target is for the year 2030, so the timeframe is implied (ten years) but not stated, and the period of implementation is not stated.
(b) Whether it is a single-year or multi-year target, as applicable.	Yes No	Single-year targetMulti-year target	Implied single year target, but information not explicitly provided.
3. Scope and coverage:			
(a) General description of the target	Yes No	 Key goals of the target – emissions reduction/limitation, intensity, BAU reduction, PAMs, mitigation co-benefits, in quantitative or qualitative terms. Time frame, period of implementation, target year(s). 	General description provided – the Korean target is defines as a reduction from BAU by 2030 of 37%.
(b) Sectors, gases, categories and pools covered by the nationally determined contribution, including, as applicable, consistent with Intergovernmental Panel on Climate Change (IPCC) guidelines;	Partly No	Sectors: Energy IPPU AFOLU – specified separately for land use and agriculture LULUCF (if specified separately from above) Agriculture (if specified separately from above) Waste Other Categories: Categories and sub-categories used for each sector above in the NDC Gases: Carbon dioxide: CO2 Methane: CH4 Nitrous oxide: N2O Perfluorocarbons: PFCs Hydrofluorocarbons: HFC Sulphur hexafluoride: SF6 Nitrogen trifluoride: NF3 Pools: Aboveground biomass Belowground biomass Dead wood Litter Soil organic matter	The Korean NDC covers six gases, and all sectors other than LULUCF. The inclusion of LULUCF will be decided "at a later date". No information is included as to how this will be accounted for, and which categories will be included if it is.

Element of ICTU	Included in NDC	Category of assessment	Information in NDC and assessment
(c) How the Party has taken into consideration paragraph 31(c) and (d) of decision 1/CP.21; ("(c) Parties strive to include all categories of anthropogenic emissions or removals in their nationally determined contributions and, once a source, sink or activity is included, continue to include it"; "(d) Parties shall provide an explanation of why any categories of anthropogenic emissions or removals are excluded");	Yes Partly No	 Comparison of categories of anthropogenic emissions and removal included in previous NDC and current NDCs. Explanation for the omission of any categories. 	The NDC contains all categories except LULUCF, which may be included at a later stage. No explanation is given for not including LULUCF. No comparison was made with previous targets (under the Convention).
(d) Mitigation co-benefits resulting from Parties' adaptation actions and/or economic diversification plans, including description of specific projects, measures and initiatives of Parties' adaptation actions and/or economic diversification plans.	Yes Partly No n/a	Economic diversification: Energy Efficiency Renewable energy Carbon Capture and Utilization/Storage Utilization of gas Methane recovery and flare minimization Other	Not applicable.
		Adaptation actions with mitigation co-benefits: Water and waste-water management Urban planning Marine Protection Reduced desertification Other	
		Mitigation co-benefits: Stated – yes / no Quantified In t CO2-eq	

Element of ICTU	Included in NDC	Category of assessment	Information in NDC and assessment
4. Planning processes:			
(a) Information on the planning processes that the Party undertook to prepare its nationally determined contribution and, if available, on the Party's implementation plans, including, as appropriate:			
(i) Domestic institutional arrangements, public participation and engagement with local communities and indigenous peoples, in a gender-responsive manner;	Yes Partly No	Domestic institutional arrangements: No information provided Some information provided Detailed information provided Public participation and engagement: No information provided Some information provided Detailed information provided Information on stakeholder engagement: No information provided Information on engagement with local communities provided Information on engagement with indigenous peoples provided Information on other stakeholder engagement provided	Some information was provided on domestic institutional arrangements and the NDC process, and limited information was provided on public participation. No information was provided on stakeholder consultations with local communities, indigenous peoples, and/or whether the NDC process was conducted in a gender-responsive manner.
		Does the country report on whether the NDC process was conducted in a gender-responsive manner?: No information provided Some information provided Detailed information provided	
((i).cont.)if available, information provided on a Party's implementation plans;		Implementation plans: No information provided Some information provided Enhanced conformance: Detailed information on how implementation plans will achieve the objectives of its NDC.	Some detail is provided on implementation, especially legislation and related programmes.

Element of ICTU	Included in NDC	Category of assessment	Information in NDC and assessment
(ii) Contextual matters, including, inter alia, as appropriate:	Partly No	 a. Inclusion of relevant national circumstances, such as geography, climate, economy, sustainable development and poverty eradication No information provided Some information provided Detailed information provided b. Reporting on best practices and experience related to the preparation of the nationally determined contribution; Best practices and experience shared: None Some Many c. Information provided on other contextual aspirations and priorities acknowledged when joining the Paris Agreement: Yes No 	No information is provided on national circumstances, but some information is provided on experiences developing the NDC.
(b) Specific information applicable to Parties, including regional economic integration organizations and their member States, that have reached an agreement to act jointly under Article 4, paragraph 2, of the Paris Agreement, including the Parties that agreed to act jointly and the terms of the agreement, in accordance with Article 4, paragraphs 16–18, of the Paris Agreement;	Yes Partly No n/a	 Terms of the agreement to act jointly. Emission level allocated to each Party within the relevant time period Enhanced conformance: Detailed description of the basis for burden-sharing within the REIO. 	Not applicable.
(c) How the Party's preparation of its nationally determined contribution has been informed by the outcomes of the global stocktake, in accordance with Article 4, paragraph 9, of the Paris Agreement;	Yes No	Information on how the previous global stock-take (GST) informed the NDC: Yes No Enhanced conformance: Consideration of the Secretariat's synthesis paper in the 2020 update.	No information included on this.
(d) Each Party with a nationally determined contribution under Article 4 of the Paris Agreement that consists of adaptation action and/or economic diversification plans resulting in mitigation co-benefits consistent with Article 4, paragraph 7, of the Paris Agreement to submit information on:			
(i) How the economic and social consequences of response measures have been considered in developing the nationally determined contribution;	Yes No n/a	 The NDC contains information on how the economic and social consequences of response measures have been considered in developing the NDC. 	Not applicable.



(a) Assumptions and methodological approaches used for accounting for anthropogenic greenhouse gas emissions and removals corresponding to the Party's nationally determined contribution, consistent with decision 1/CP.21, paragraph 31, and accounting guidance adopted by the CMA;	Yes No	 A general description of the accounting approach. Detailed description of how the country will account for the land sector in its NDC. 	No information provided on how Korea will account for its NDC. It is implied but not stated that an inventory-based approach will be used, and since the land sector is currently not included, no information is provided on accounting for the land sector.
 (b) Assumptions and methodological approaches used for accounting for the implementation of policies and measures or strategies in the nationally determined contribution; 	Yes Partly No n/a	 No information provided Some information provided Detailed information provided 	Not applicable.
(c) If applicable, information on how the Party will take into account existing methods and guidance under the Convention to account for anthropogenic emissions and removals, in accordance with Article 4, paragraph 14, of the Paris Agreement, as appropriate;	YesPartlyNo	 The country has specified that they will use existing methods and guidance. The country has specified that they will not use existing methods and guidance. The country has not provided any information on this. 	It is implied but not stated that Korea will use an inventory-based approach – inventory methodology is specified in the NDC via a reference to South Korea's first BUR – but since the land sector is not included at this stage, no approach to removals is specified.

Element of ICTU	Included in NDC	Category of assessment	Information in NDC and assessment
(ii) For Parties with nationally determined contributions that contain nongreenhouse-gas components, information on assumptions and methodological approaches used in relation to those components, as applicable;	Yes Partly No n/a	Assumptions and methodologies for non-GHG components: Quantified in a manner where mitigation outcomes are clear. Quantifiable, but requiring assumptions to understand mitigation outcomes. Not quantifiable.	Not applicable.
(iii) For climate forcers included in nationally determined contributions not covered by IPCC guidelines, information on how the climate forcers are estimated;	Yes No n/a	 The NDC includes black carbon, and includes information on how it is estimated. The NDC includes other short-lived climate forcers, and information on how these are estimated. 	Not applicable.
(iv) Further technical information, as necessary;	Yes No n/a	Further information provided: Yes No Not Applicable	Not applicable. No further information would be necessary if the information above were to be provided comprehensively.
(g) The intention to use voluntary cooperation under Article 6 of the Paris Agreement, if applicable.	Yes No	 Information on whether the country intends to participate in Article 6 activities during the NDC implementation period. Information on whether the country intends to us ITMOs to achieve its NDC. Enhanced conformance: The extent to which the target depends on use of ITMOs. 	The Korean NDC states that Korea will make use of Article 6 to meet its target, but does not provide any further details.
6. How the Party considers to national circumstances:	that its national	ly determined contribution is fair an	d ambitious in the light of its
(a) How the Party considers that its nationally determined contribution is fair and ambitious in the light of its national circumstances;	Fair Yes No Ambitious Yes No	 Inclusion of grounds for why the NDC target is fair. Inclusion of grounds for why the NDC target is ambitious. 	Korea observes that it has "set a fair and ambitious target to the extent possible" but does not provide any grounds for why its targets should be considered fair and ambitious.
b) Fairness considerations, including reflecting on equity;	Yes Partly No	The country has provided in its NDC: References to equity analyses by international experts. References to equity analyses by incountry experts. References to indicators found in equity literature. References to the application of preferred equity indicators to other	Korea does not provide any grounds for considering its contribution to be fair.

countries.

Element of ICTU	Included in NDC	Category of assessment	Information in NDC and assessment
7. How the nationally determined set out in its Article 2:	mined contribu	tion contributes towards achieving	the objective of the Convention as
(a) How the nationally determined contribution contributes towards achieving the objective of the Convention as set out in its Article 2;	Yes Partly No	 The NDC refers to Article 2 of the Convention in relation to mitigation ambition. The NDC contains information on how it contributes to the reduction of emissions in terms of Article 2 of the Convention. The NDC contains information on how natural sinks are being maintained and enhanced. 	The NDC refers to Article 2 of the Conventior in relation to the NDC target ("toward: achieving the objective of the United Nations Framework Convention on Climate Change as set out in its Article 2"), but does not provide any further detail on this.
(b) How the nationally determined contribution contributes towards Article 2, paragraph 1(a), and Article 4, paragraph 1, of the Paris Agreement.	Yes Partly No	 The NDC contains a reference to the peaking year – either when it occurred or when it is projected to be. For countries whose emissions have peaked, the NDC provides grounds for the NDC target being consistent with "rapid reductions thereafter". The NDC contains a reference to a national policy goal of net zero emissions, and by which year. The NDC contains a clear link between the Paris Agreement's Article 2.1(a) and the country's NDC. 	The Korean NDC contains a reference to the 2030 goal "expected to be in line with recommendations for global emissions reductions by 2050 from the IPCC's AR5, but no specific linkage to either Article 2.1.a o 4.1 of the Paris Agreement.

For questions, please contact

Sejong Youn

Solutions for our Climate sejong.youn@forourclimate.org

Sebastian Wegner

International Secretariat of Climate Transparency swegner@governance-platform.org

Acknowledgements

A particular thanks goes to Andrew Marquard and Harald Winkler (University of Cape Town) for leading the development of the methodology of this assessment.

For further details please refer to the methodology which can be downloaded under www.climate-transparency.org.



Solutions for our Climate (SFOC) is a Korea-based group that advocates stronger climate policies and reforms in power regulations. SFOC is led by legal, economic, financial, and environmental experts with experience in energy and climate policy. SFOC works in close partnership with domestic and international civil society organization.

www.forourclimate.org



Climate Transparency is a global partnership with a shared mission to stimulate a "race to the top" in climate action in G20 countries through enhanced transparency. It convenes partners from Argentina (Fundación Ambiente y Recursos Naturales), Brazil (CentroClima/COPPE UFRJ), China (Energy Research Institute), France (The Institute for Sustainable Development and International Relations), Germany (Germanwatch HUMBOLDTVIADRINA Governance Platform, NewClimate Institute), India (The Energy and Resources Institute), Indonesia (Institute for Essential Service Reform), Mexico (Iniciativa Climática de México), South Africa (Energy Research Center/University of Cape Town) and the UK (Overseas Development Institute).

Climate Transparency is funded by the ClimateWorks Foundation, European Climate Foundation, The Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) and the World Bank.

www.climate-transparency.org