Categorization of INDCs in the light of Art. 6 of the Paris Agreement

Discussion Paper

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This paper was written for the German Environment Agency (UBA) as part of the project titled “Entwicklung von Konzepten zur Umsetzung von neuen oder Transformation von vorhandenen Marktmechanismen in ein neues UNFCCC Klimaabkommen ” (FKZ 3716 42 501 0). This project is being carried out by Öko-Institut (coordination) in cooperation with Stockholm Environment Institute (SEI) and INFRAS.

Abstract

Article 6 of the Paris Agreement introduces provisions for using international market mechanisms to fulfil nationally determined contributions (NDCs). International rules governing these approaches are currently being negotiated under the United Nations Framework Convention on Climate Change (UNFCCC). The diversity of (intended) nationally determined contributions (I)NDCs poses considerable challenges for robust accounting of international transfers under Article 6. This discussion paper evaluates the 163 (I)NDCs that have been submitted as of 12 October 2016 with regard to features that are critical for robust accounting of international transfers. This includes the type of targets; the reference year or period as well as target year or period; the sectoral and geographical scope of the target; the covered greenhouse gases; the conditionality of the target; the methodologies used for estimating greenhouse gas (GHG) emissions; the values used for global warming potentials; and the intended use of market mechanisms. The paper summarizes how many (I)NDCs representing what share of global GHG emissions have common features. Economy-wide absolute emission targets greatly facilitate robust accounting of international transfers. We find that currently 18 (I)NDCs, covering about 41 % of global GHG emissions, have such targets.

Kurzbeschreibung

Artikel 6 des Pariser Klimaabkommen ermöglicht die Nutzung von internationalen Marktmechanismen zur Erfüllung von Klimaschutzbeiträgen der Staaten. Internationale Regeln für diese Mechanismen werden derzeit bei den internationalen Klimaverhandlungen diskutiert. Die Vielfältigkeit der Klimaschutzbeiträge der Staaten stellt eine erhebliche Herausforderung für eine robuste Bilanzierung von international übertragenen Emissionsminderungen dar. Dieses Diskussionspapier analysiert für die 163 Klimaschutzbeiträge, die bis zum 12. Oktober 2016 eingereicht wurden, diejenigen Aspekte, die zentral für eine robuste Bilanzierung sind. Hierzu zählen die Art des Klimaschutzziels, das Referenz- und Zieljahr oder die Zielperiode, die eingeschlossenen Sektoren, die geographische Reichweite, die berücksichtigten Treibhausgase, die Abhängigkeit der Ziele von internationaler Unterstützung, die Methoden zur Quantifizierung der Treibhausgasemissionen, die genutzten Werte für die Treibhausgaspotenziale und die geplante Nutzung von Marktmechanismen. Das Papier fasst zusammen, welche Länder mit welchem Anteil an den globalen Treibhausgasemissionen welche Art von Klimaschutzbeiträgen eingereicht haben. Absolute Klimaziele für die gesamte Volkswirtschaft vereinfachen eine robuste Bilanzierung von international übertragenen Emissionsminderungen erheblich. Die Analyse zeigt, dass derzeit 18 eingereichte Klimaschutzbeiträge, die 41 % der globalen Treibhausgasemissionen umfassen, solche Ziele haben.

Content

1 Introduction 6

2 Categorization of mitigation targets in (I)NDCs 6

2.1 Target type 8

2.2 Reference and target years 9

2.3 Sectoral and geographical coverage 9

2.4 GHGs covered 10

2.5 IPCC Guidelines 10

2.6 GWP values 10

2.7 Intended use of international market mechanisms 11

3 Summary of key features 11

3.1 Distribution of (I)NDCs by target type and scope 11

3.2 (I)NDCs of G20 countries 12

4 Conclusions 14

5 Bibliography 14

List of Figures

Figure 1: Share of global GHG emissions by target type and scope 12

List of Tables

Table 1: Overview of key features of all submitted (I)NDCs 7

Table 2: Key features of G20 (I)NDCs 13

Abbreviations

BAU	Business-As-Usual
CDM	Clean Development Mechanism
CMA	Conference of the Parties serving as the meeting of the Parties to the Paris Agreement
EU	European Union
GDP	Gross Domestic Product
GHG	Greenhouse gas
GWP	Global warming potential
HCFC	Hydrochlorofluorocarbon
HFC	Hydrofluorocarbon
INDCs	Intended nationally determined contribution
IPCC	Intergovernmental Panel on Climate Change
KP	Kyoto Protocol
KP 1, KP 2	First/second commitment period under the Kyoto Protocol
LULUCF	Land use, land use change and forestry
NDC	Nationally determined contribution
PFC	Perfluorocarbon
QELRO	Quantified emission limitation or reduction objective
SLCP	Short lived climate pollutants
t CO_2eq	Tonnes of CO_2 equivalent
UNFCCC	United Nations Framework Convention on Climate Change

1 Introduction

Under the Paris Agreement (UNFCCC, 2015), all countries shall prepare and communicate nationally determined contributions (NDCs) and outline their mitigation measures. In the preparation of the COP 21 in December 2015 in Paris, most countries submitted intended nationally determined contributions (INDC). Once a country ratifies the PA, the INDC becomes the country's NDC. Although Parties can still update their INDCs in light of the adopted Agreement during the ratification process, most INDCs will likely remain unchanged.[1]

As of 12 October 2016, 163 countries have submitted (I)NDCs to the United Nations Framework Convention on Climate Change (UNFCCC) secretariat; out of these, only eleven were handed in after the Paris Agreement had been adopted. The (I)NDCs differ wildly, inter alia in terms of the scope of the contribution, the target type, the reference year and the modalities for estimating greenhouse gas (GHG) emissions and reductions.

Article 6 of the Paris Agreement introduces provisions for using international market mechanisms to fulfil NDCs. International rules governing these approaches are currently being negotiated under the UNFCCC. These rules will need to take into account the different characteristics of the NDCs. The aim of this paper is to analyse and categorize the submitted (I)NDCs to inform the negotiations under Article 6. It focuses on those aspects that are most relevant for developing accounting rules for international transfers under Article 6:

- Target type;
- Reference year or period as well as target year or period;
- Sectoral and geographical scope of the target;
- Covered GHGs;
- Conditionality of the target;
- Methodologies for estimating GHG emissions and reductions as well as global warming potentials (GWPs); and
- The intended use of market mechanisms.

Aspects not directly relevant for the development of the rules for Article 6 have not been included in the analysis. This includes information on the level of the targets, on adaptation or the (I)NDC planning process. In chapter 2, we further describe the features analysed in this study and evaluate all 163 (I)NDCs. We summarize key features in chapter 3 and provide conclusions in chapter 4.

This paper is part of a larger research project exploring different aspects of international rules for Article 6. In two separate papers, we discuss the differences and commonalties between the market mechanisms under the Paris Agreement and the Kyoto Protocol (Schneider et al., 2016b) and explore approaches for robust accounting of international transfers (Schneider et al., 2016a). Further papers will be produced in the course of 2017.

2 Categorization of mitigation targets in (I)NDCs

In this section, we evaluate all 163 (I)NDCs that were submitted as of 12 October 2016 according to categories relevant for the purpose of accounting for international transfers under Article 6. The different categories are shortly discussed and results from the evaluation of (I)NDC are illustrated and summarized. Table 1 provides an overview of all analysed features of (I)NDCs. Below we evaluate and summarize key findings.

1 The analysis presented here is based on the INDC submissions and assumes that the NDCs are identical.

Table 1: Overview of key features of all submitted (I)NDCs

	Features of (I)NDCs	Number of (I)NDCs	Share of global emissions
GHG targets	Absolute GHG target	43	41.4 %
	GHG target relative to BAU	74	15.6 %
	GHG intensity targets	10	32.8 %
	Peak of GHG emissions	4	2.0 %
	No GHG target	32	4.3 %
Non-GHG targets	Non-GHG target without GHG target	18	1.2 %
	Non-GHG target in addition to GHG target	73	46.0 %
	No non-GHG target	72	48.9 %
Type of Non-GHG targets	Multiple non-GHG targets	17	31.9 %
	Renewable energy target only	63	13.3 %
	Energy efficiency target only	1	0.0 %
	Forestry target only	10	2.0 %
	No non-GHG target	72	48.9 %
Actions	Actions without targets only	14	3.1 %
	Actions in addition to other targets	19	1.4 %
	No actions	130	91.6 %
Conditionality	Unconditional target only	34	68.1 %
	Conditional target only	49	12.4 %
	Unconditional and conditional target	80	15.6 %
Base year	Historic year or fixed level	53	74.0 %
	Projected BAU emissions	79	15.8 %
	out of which: with fixed baseline	3	0.0 %
	out of which: with dynamic baseline	4	1.8 %
	Not specified	31	6.3 %
Target year	Single year (2030)	106	69.7 %
	Single year (other years)	11	19.6 %
	Multiple years (2030 and at least one other year)	11	0.5 %
	Not specified	35	6.3 %
Sectoral cover-age	All sectors (Energy, Industry, Agri., LULUCF, Waste)	71	86.0 %
	Energy and 3 other sectors	27	4.8 %
	Energy and 2 other sectors	22	1.7 %
	Energy and 1 other sectors	17	0.6 %
	Energy only	20	1.4 %
	Some Energy subsectors only	6	1.6 %

	Features of (I)NDCs	Number of (I)NDCs	Share of global emissions
GHG coverage	KP CP2 (CO_2, CH_4, N_2O, HFC, PFC, SF_6, NF_3)	21	40.1 %
	KP CP1 (CO_2, CH_4, N_2O, HFC, PFC, SF_6)	18	17.1 %
	CO_2, CH_4, N_2O and 2 other GHG	3	0.2 %
	CO_2, CH_4, N_2O and 1 other GHG	6	0.3 %
	CO_2, CH_4, N_2O	72	7.4 %
	CO_2, CH_4	4	0.0 %
	CO_2 only	16	24.8 %
	inclusion of other pollutants (SLCP or HCFC)	3	
	Not specified	23	5.5 %
IPCC Guidelines	1996 IPCC Guidelines and 2000 GPG	41	28.0 %
	2006 IPCC Guidelines	49	2.1 %
	Mixed	11	60.5 %
	Not specified	62	5.5 %
Global Warming Potentials	2nd IPCC Assessment Report	45	5.4 %
	4th IPCC Assessment Report	33	45.3 %
	5th IPCC Assessment Report	3	3.7 %
	Not specified	82	41.7 %
Carbon Markets	Participation in international carbon markets	80	25.2 %
	No participation	17	31.6 %
	Not specified	66	39.3 %
CDM	Participation in CDM	28	1.4 %
	No participation	2	10.6 %
	Not specified	133	84.1 %

Notes: Countries which did not specify their conditionality of their (I)NDC are included under "unconditional".
Source: Own compilation based on IGES (2016), WRI (2016) and PIK (2016)

2.1 Target type

Under the Kyoto Protocol, Annex I countries have quantified emission limitation or reduction objectives (QELROs) expressed in relation to historic emission levels. All other countries have no quantified reduction commitment. Under the Paris Agreement, the separation between industrialised (Annex I) and developing (non-Annex I) countries has been lifted and all Parties have to communicate mitigation targets or actions through their NDCs. However, the targets are selfdetermined, in particular the type and ambition of targets. Parties may opt for very different target types. The choice of target type depends on national circumstances, though the Paris Agreement and future rules by the CMA may determine or encourage particular features of mitigation targets. According to Article 4.4 of the Agreement, developed countries should undertake "economy-wide absolute emission reduction targets" and developing countries are encouraged to move over time towards "economy-wide emission reduction or limitation targets" in the light of national circumstances. Moreover, Parties are negotiating guidance on features of NDCs (paragraph 26 of decision 1/CP.21), guidance on information to be provided by Parties in order to facilitate clarity, transparency and understanding of NDCs (paragraph 28 of decision 1/CP.21) as well as common time frames (Article 4.10 of the Paris Agreement).

Most countries have communicated GHG targets, often in combination with non-GHG targets. Among the countries with GHG targets, most have either opted for a target in relation to business-as-usual (BAU)

projections or an absolute target. The latter can be expressed either as a change compared to a historic year or set in absolute quantities. With the exception of Turkey, all Annex I countries but also 29 developing countries selected absolute GHG targets. This target type has been communicated by countries covering over 41 % of global GHG emissions. 74 countries responsible for one sixth of global GHG emissions intend to achieve a reduction compared to a projection of BAU emissions. 10 countries responsible for about a third of global emissions submitted intensity targets. They pledge to reduce the carbon intensity of their economy, and use metrics such as t CO_2 / Gross Domestic Product (GDP) or t CO_2 / capita. Two countries (Saint Lucia and Zimbabwe) have an intensity target against a projected BAU value. Four countries intend to peak their national GHG emissions before 2030 but have no quantified target. A group of 18 countries has submitted only quantified non-GHG targets (e.g. reduction of deforestation or a minimum share of renewable electricity generation). Lastly, 14 countries only pledged actions that contribute towards reducing GHG emissions without communicating a specific target.

2.2 Reference and target years

Countries use a range of different reference years. Most (I)NDCs deviate from a projection of their BAU emissions in 2030. Among the countries using a projected BAU scenario, four countries have already decided that they employ a dynamic baseline, i.e. they will update their BAU projections and hence their target at some time in the future. Three countries have communicated that their projected BAU emissions as included in the (I)NDC will not be changed anymore. Both approaches can pose challenges: if the real development of the parameters driving GHG emissions is very different compared to the assumptions made when communicating the NDC, the actual ambition of the mitigation target may be dominated by the uncertainty of the BAU projection. On the other hand, countries which will recalculate their projected BAU emissions will not have certainty over their absolute GHG target. For these countries it will be harder to estimate their progress towards their GHG target and hence whether they can sell or need to buy international transferred mitigation outcome or emission reductions under Article 6. For all other countries with targets in relation to project BAU emissions, information whether projected BAU emissions are fixed or dynamic is not available.

Over 50 countries have expressed their target against historic emission levels; the remaining countries either have no quantified target or have not used a base year when determining their mitigation target. Different historic base years and fixed emission levels do not pose any accounting problems with regard to the target type for international transfers under Article 6.

117 (I)NDCs have set a quantified target for 2030; this figure includes 11 countries which have selected more than one target year or a target period. Another12 countries have selected 2020, 2025, 2035 or 2050 as the year when they intend to achieve their target.

2.3 Sectoral and geographical coverage

Less than half of the submitted (I)NDCs address all sectors of the national economy, as envisaged under Article 4.4. Together these countries are responsible 86 % of global GHG emissions. All other 92 countries include the energy sector in their contribution; half of those also included agriculture and waste, whereas only a third address industrial processes and landuse, landuse change and forestry (LULUCF). Many especially smaller countries, such as small island states, stated that they did not include some sectors because of negligible emissions.

Most Parties have included their entire territory in their (I)NDC. There are only few exceptions. For example, the geographic coverage in the waste sector in Sudan is limited to one out of 18 states. All other sectors covered by Sudan's INDC are included for the whole country.

Implementing international market mechanisms and accounting for the international transfer of their mitigation outcomes is simpler for countries that include all sectors and the entire territory in their NDCs. Where sectors or geographical areas are excluded, it is necessary to identify whether the mitigation outcomes from mechanisms are covered by the (I)NDCs, and – in cases where the coverage would be conditional upon international support – whether they are included in the conditional and/or unconditional part of the (I)NDC. Mechanisms may also have to consider crosseffects between sectors and regions covered and not covered by the (I)NDC.

2.4 GHGs covered

The Paris Agreement targets all GHGs, as defined in the Convention. Under the UNFCCC process, however, accounting of mitigation action generally excludes gases that are controlled under the Vienna Convention for the Protection of the Ozone Layer and its Montreal Protocol. GHGs commonly reported under the UNFCCC include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF_6) and nitrogen trifluoride (NF_3). In the first commitment period of the Kyoto Protocol, the first six GHGs were covered, in the second commitment period all seven GHGs are covered.

As with a limited sectoral or geographical coverage, a limited coverage of GHGs raises issues for the design of market mechanisms and the accounting of international transfers. 40 (I)NDCs, covering countries responsible for about 57 % of global GHG emissions, include all the six or seven GHGs in their (I)NDCs. Another 16 (I)NDCs, covering countries responsible for about 25 % of global GHG emissions, include only CO_2. Most countries (72), which, however, cover only 7.4 % of global GHG emissions, include CO_2, CH_4 and N_2O in their (I)NDC. Three countries have included additional greenhouse gases: Mexico black carbon, Mauritius shortlived climate pollutants (SLCPs) and Oman hydrochlorofluorocarbons (HCFCs) which are already addressed by the Montreal Protocol. Unconditional and conditional targets

Most developing countries have communicated in their (I)NDCs mitigation targets that are conditional upon international support being provided to achieve the target. Among them, 49 countries, covering about 12 % of global GHG emissions, have communicated only a conditional target, and 80 countries, covering about 16 % of global GHG emissions, have communicated both a conditional and an unconditional target. The 34 (I)NDCs that have only include unconditional targets cover about 70 % of global GHG emissions.[2] They include all industrialized countries, with the exception of Turkey, and most G20 countries. Out of the latter group, India and Saudi Arabia have only conditional targets; Argentina, Indonesia, South Africa and Turkey have communicated both an unconditional and conditional target. Finance and technology transfer are among the support requested to achieve conditional targets. Most countries do not mention international market mechanisms with respect to conditional mitigation targets.

2.5 IPCC Guidelines

National GHG inventories are prepared based on guidelines and good practice guidance by the Intergovernmental Panel on Climate Change (IPCC). The IPCC adopted relevant guidelines first in 1996 and later on revised and amended them through Good Practice Guidance, Good Practice Guidance on LULUCF, and the Kyoto Protocol supplement. A new version of guidelines was adopted in 2006. Relevant decisions under the UNFCCC and the Kyoto Protocol require the use of these guidelines.

Article 13.7 of the Paris Agreement requires all countries to prepare a national GHG inventory report using "good practice methodologies accepted by the IPCC and agreed upon by the CMA". The CMA may thus decide which guidelines will be applicable for the purpose of the Paris Agreement.

Among the countries that specify which guidelines they intend to use, most countries intend to use the 2006 IPCC Guidelines, but especially smaller developing countries also intend to use the 1996 Guidelines and the 2000 Good Practice Guidance or a combination of the 1996 and 2006 Guidelines (see Table 1).

2.6 GWP values

The GWPs of GHGs are specified in the assessment reports by the IPCC. The scientific understanding of the GWP of gases has advanced over time and the GWP values depend on the current concentrations of these gases in the atmosphere. Therefore, GWP values are updated in each IPCC assessment report, sometimes leading to significant revisions compared to previous estimates. The use of different GWP values could exacerbate the accounting of international transfers between countries (Schneider et al., 2016a). The CMA may provide guidance on the use of GWP values, for instance, as part of the guidance for accounting for Parties' NDCs (see paragraph 31(a) of decision 1/CP.21).

2 Many countries including most Annex I countries did not specify whether their INDC is conditional or not. We have assumed that these targets are unconditional.

In their (I)NDCs, countries use different sets of GWP values from different IPCC assessment reports. 33 countries covering about 45 % of global GHG emissions intend to use the values from the 4th assessment report which are also applicable in the second commitment period of the Kyoto Protocol. Only three countries, covering about 4 % of global GHG emissions, intend to use the latest available values from the 5th assessment report. 45 countries, which, however, only represent about 5 % of global GHG emissions, intend to use the older values from the 2nd assessment report which were applicable in the first commitment period of the Kyoto Protocol and should be used in the Biennial Update Reports and National Communications from Non-Annex I countries (UNFCCC, 2014). Many countries, covering 42 % of global GHG emissions, do not specify which GWP values they intend to use (see Table 1).

2.7 Intended use of international market mechanisms

Information on the intended use of international market mechanisms is limited in (I)NDCs. Indeed, at the time when (I)NDCs were submitted, it was yet unclear what type of provisions on international market mechanisms would be included in the Agreement. Based on information by IGES (2016), 80 countries, covering about 25 % of global GHG emissions, express some type of support to international market mechanisms in their (I)NDCs, though it is not always clear whether they actually intend to make use of these mechanisms. Most of these countries are developing countries. 17 countries, representing 32 % of global GHG emissions, declared that they do not intend to participate in international market mechanisms. Most countries do not specify whether they intend to use international market mechanisms (see Table 1).

3 Summary of key features

3.1 Distribution of (I)NDCs by target type and scope

Figure 1 summarizes how the different target types and their scope are distributed relative to the emissions of the countries. We distinguish the target types and their scope with regard to key aspects for accounting of international transfers, including:

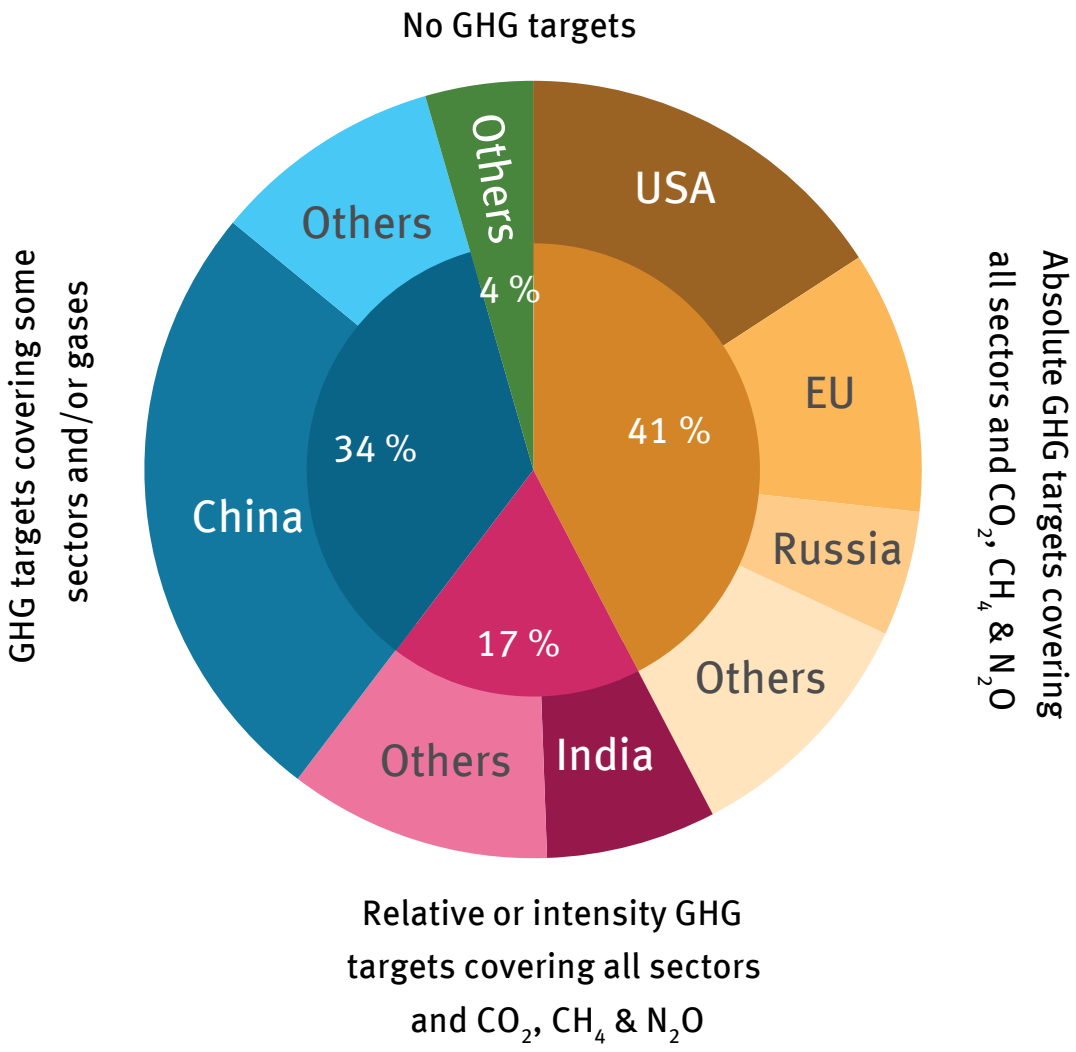
- whether or not targets are expressed in GHG emissions ("GHG targets" versus "No GHG targets");
- whether GHG targets are expressed in absolute terms, or as intensity targets or targets relative to projected BAU emissions ("absolute targets" versus "relative or intensity targets"); and
- whether they cover all sectors and the most important GHGs or only some sectors and some of these gases ("all sectors and CO_2, CH_4 & N_2O" versus "some sectors and/or gases"). [3]

23 (I)NDCs covering about 41 % of global GHG emissions have absolute emissions targets that include all sectors and at least CO_2, CH_4 and N_2O. For these (I)NDCs, accounting for international transfers is straightforward, as long as common time frames and GWP values are applied. With the exception of F-gases, these targets could be considered as "economy-wide absolute emission targets", as required for developed countries under Article 4.4 of the Paris Agreement. 32 (I)NDCs covering about 17 % of global GHG emissions have the same coverage as the first group, but have defined their targets as either intensity targets or targets relative to BAU emission projections. For these countries, targets would need to be calculated – at least expost – in absolute terms to account for international transfers (Schneider et al., 2016a). Again with the exception of F-gases, these targets could be considered as "economy-wide emission targets", as encouraged for developing countries under Article 4.4 of the Paris Agreement.[4]

76 (I)NDCs covering about 34 % of global GHG emissions include only some sectors and/or some of the three gases. For these (I)NDCs, robust accounting requires clear identification whether the mitigation outcomes are generated within or outside the scope of the (I)NDC. Lastly, 32 (I)NDCs covering about 4 % of global GHG emissions do not include a GHG target, but only non-GHG targets (e.g. for renewable energy) or only actions. Robust accounting for international transfers is more challenging for these countries (Schneider et al., 2016a).

3 We exclude here F-gases for simplicity for several reasons: the coverage of F-gases varies considerably among countries, they make up only a minor share of total national GHG emissions, and the most important gas type – HFCs – will be addressed under the recently adopted Kigali Amendment to the Montreal Protocol for Substances that Deplete the Ozone Layer.

4 Out of the 55 (I)NDCs with "quasi economy-wide emissions targets" that have a GHG target there are 25 countries responsible for about 5 % of global GHG emissions that do not cover all F-gases.



Source: Own compilation based on IGES (2016), WRI (2016) and PIK (2016)

Figure 1: Share of global GHG emissions by target type and scope

3.2 (I)NDCs of G20 countries

The G20 countries together with all European Union Member States are responsible for almost 80 % of global GHG emissions. Table 2 shows some key features of the (I)NDCs of those countries. With the exception of Saudi Arabia, all G20 members have pledged GHG emission targets. Amongst them all four target types (absolute target, relative to BAU, GHG intensity target and peaking of GHG emissions) are used. Most of these targets are economy-wide, e.g. cover all sectors, all Kyoto greenhouse gases and the entire country. The most relevant exception is China, which only included CO_2 emissions in its intensity target. In addition to the lack of a quantified target, Saudi Arabia's (I)NDC only covers some subsectors in the energy sector.

Table 2: Key features of G20 (I)NDCs

	Share of global emissions	GHG target	Non-GHG target(s)	Sectoral coverage	GHGs	Conditionality
Argentina	0.7 %	Relative to BAU emissions		All	KP 1	uncond. & cond.
Australia	1.2 %	Absolute GHG target	Renewable energy target	All	KP 2	uncond. only
Brazil	2.2 %	Absolute GHG target	Renewable energy target	All	KP 1	uncond. only
Canada	1.6 %	Absolute GHG target		All	KP 2	uncond. only
China	24.6 %	GHG intensity target	Multiple non-GHG targets	All	CO_2	uncond. only
European Union	10.5 %	Absolute GHG target		All	KP 2	uncond. only
India	6.8 %	GHG intensity target	Multiple non-GHG targets	All	KP 1	cond. only
Indonesia	1.8 %	Relative to BAU emissions	Renewable energy target	All	CO_2, CH_4, N_2O	uncond. & cond.
Japan	2.7 %	Absolute GHG target	Renewable energy target	All	KP 2	uncond. only
South Korea	1.3 %	Relative to BAU emissions		All except LUCF (tbd)	KP 1	uncond. only
Mexico	1.4 %	Relative to BAU emissions		All	KP 1	uncond. & cond.
Russian Federation	5.0 %	Absolute GHG target		All	KP 2	uncond. only
Saudi Arabia	1.4 %		Actions only	Some energy subsectors	not specified	cond. only
South Africa	1.1 %	Peak of GHG emissions		All	KP 2	uncond. & cond.
Turkey	0.9 %	Relative to BAU emissions	Renewable energy target	All	KP 2	uncond. & cond.
USA	15.2 %	Absolute GHG target		All	KP 2	uncond. only

Notes: KP 1: CO_2, CH_4, N_2O, HFC, PFC, SF_6; KP 2: same as KP 1 but additionally also NF_3
Source: Own compilation based on IGES (2016), WRI (2016) and PIK (2016)

4 Conclusions

Our evaluation of (I)NDCs illustrates a great diversity in the type, scope, and coverage of mitigation targets in (I)NDCs. This diversity is not only due to the diverging national circumstances, capabilities and responsibilities, but also the result of lacking international agreement on how (I)NDCs should be formulated. The Paris Agreement provides for several elements that might lead to less diversity over time, in particular when (I)NDCs will be updated and the second round of NDCs will be submitted. This includes the overall principles in Article 4.4, as well as international guidance on time frames, common metrics, features, clarity, transparency and understanding of NDCs.

The current diversity of (I)NDCs poses considerable challenges for robust accounting of international transfers under Article 6. More consistency in how (I)NDCs are formulated would greatly facilitate robust accounting and reduce complexity. Accounting for international transfers is more straightforward if countries have economy-wide – meaning here to cover the entire geographical area, all sectors and all GHGs –absolute emission targets, as required under Article 4.4 of the Paris Agreement for developed countries, and if these targets apply to the same time frame. Participation in international transfers could also be possible for the second group of countries but poses more challenges for robust accounting. Accounting for international transfers for countries that do not have absolute targets or that cover only part of their economy could be addressed through robust accounting rules. Mitigation targets expressed in non-GHG metrics pose greater challenges. For a discussion of preliminary findings for robust accounting under different types of NDCs, see Schneider et al. (2016a).

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