

Annex IV: Further methodological details

Total adaptation costs

In our report we took, for 2025 and 2030, the most credible figure we could find for the total adaptation costs for developing countries and shared this amount among contributor countries. Our methodology assumes that developed countries will themselves shoulder the burden of their own domestic adaptation costs. By 2025 and 2030, we envisage some current developing countries “graduating” to become contributors (see Annex III and below). This means that, under our methodology, they would be paying their fair shares of adaptation costs that were calculated for all current developing countries, including themselves. In practice, this approach could be followed to soften the financial impact of the graduation process. Bottom-up, national adaptation costs for each country are not currently available. If they were, they would enable us to calculate the adaptation costs of developing countries, taking into account graduation over time.

The UNEP figures for adaptation costs to which we refer in our report in principle include the level of loss and damage (to which UNEP refers as “residual damage”) considered “optimal” by those undertaking the studies of adaptation costs. However, in reality such attempts to project and put a value on fatalities and other loss and damage caused by climate change (or inadequate levels of climate change mitigation and adaptation) are in their infancy as well as being technically dubious and discriminatory against people living in poor countries (see Annex I). We therefore consider it necessary to examine the issue of loss and damage costs separately.

Calculating countries’ fair shares of adaptation finance

According to the UNFCCC, countries must contribute to implementing the Convention on the basis of their **responsibility** and **capability** (we use the more common term **capacity**). This includes requiring them to provide support to developing countries to help them to adapt to climate change.

As mentioned in Part III and Annex III of this report, the Climate Equity Reference Project (CERP)¹ has developed a “Responsibility and Capacity Index” (RCI) for all countries. This measures a country’s “responsibility” through its share of global cumulative greenhouse gas emissions and its “capacity” as its share of global income. These two measures are then combined to give the RCI. Each country’s RCI represents the proportion of global effort that a country should make towards addressing climate change, if all countries are to contribute.

In making use of these RCI values, we have chosen to give equal weight to the responsibility and capacity components. It is in principle possible to give more weight to one of these components than the other, but there seems no obvious logic for doing so and in any case the results do not change very much.

¹ <http://calculator.climateequityreference.org/>

In Annex III of the report, we outlined the three-step process we applied to calculate the fair shares. In this annex we discuss the various options available and explain our choices, made in order to respect the principle of equity, as set out in the UNFCCC.

Responsibility

A country's share of cumulative GHG emissions (i.e. the sum of its emissions between a certain year in the past and the present as a percentage of the same sum for all countries) is used as the measure of its responsibility for climate change. Using data from CERP's Climate Equity Reference Calculator, one faces the following choices.

The starting year for adding up these emissions (or baseline year):

We choose 1850, as the earliest year after the industrial revolution for which reliable emissions data are available. This seems the fairest choice of baseline year to reflect the responsibility borne by countries that industrialised earliest. However, we also indicate in Table 3, Annex II the differences in the fair shares that would result from the less equitable choice of 1950, in combination with a less equitable means of calculating a country's income (medium progressivity). See below for a description of the effects of these changes.

Changing the baseline year alone has only a small effect on the RCI values and fair shares. Even changing the baseline to 1990 only decreases the UK's RCI by 9% for the strong progressivity income setting, compared to a decrease of 7% for the change from 1850 to 1950. For the USA, changing the baseline year from 1850 to 1950 means its RCI value decreases by 1% for the strong progressivity income setting and by 4% for the medium progressivity income setting.

While the 1850 baseline is the most equitable setting available in the CERP calculator, an even fairer approach would be to give greater weight to earlier emissions, since these have been in the atmosphere for longer and contributed to global warming that has already held back progress in some developing parts of the world. An alternative approach would be to divide up the total carbon budget that can be used without exceeding dangerous temperature rise (including greenhouse gases already emitted) and divide this out among countries on a simple per capita basis. This would reveal that rich nations have already exceeded their fair share of the global carbon budget. An equity argument could be made for weighting emissions that exceed a national carbon budget far higher than those that do not.

For all these reasons, we consider an 1850 baseline year – with equal weight given to all emissions regardless of their timing or their status with respect to a national carbon budget – to be a conservative selection.

The mitigation pathway:

To calculate fair shares for a given year in the future, one needs projections of baseline emissions levels for each country between the present and the year of interest. CERP provides such projections for three different mitigation pathways. We choose the middle of the three, which is the "2°C standard" pathway: a pathway with a greater than 66% chance of staying within 2°C in 2100, and hence broadly consistent with the UNFCCC's agreed aim, even if we consider a more ambitious target necessary to alleviate adaptation costs and loss and damage. Again, the interested reader can make a different choice and will find the adaptation fair shares do not change much,

though of course the adaptation costs will change dramatically with lower levels of mitigation action.

Inclusion of greenhouse gas emissions from land use, land-use change and forestry (LULUCF):

We choose to include LULUCF emissions, since responsibility for climate change does not depend upon the source of emissions. Inclusion of these emissions does not significantly alter the fair shares of developed countries in most scenarios - it can however increase significantly (by around a half) the fair share of Brazil, as a major agricultural economy. Further improvements to the data and methodology used to apportion emissions from LULUCF would be beneficial before countries significantly affected by their inclusion committed to a certain fair share. (In this regard, the FAOSTAT GHG database² may be useful.) However, since Brazil is not currently classified as a contributor country under the UNFCCC, it may be possible for a future fair share to be negotiated reasonably by trading off conservativeness in LULUCF emissions against ambition on the point at which the country becomes a contributor (or *vice versa*): see below for more on this issue.

Assigning emissions from goods imported for consumption to the importing nation rather than the producing nation:

We choose to use the CERP setting that allocates emissions on a consumption basis, so that emissions from the production and transportation of goods made in one country but consumed in another count towards the emissions of the consumer country. We consider this a fairer basis for assessments of a country's responsibility for climate change. Further advances in data availability would be beneficial to apply this approach comprehensively, but without demand for the data, it is unlikely to appear. This is of course a controversial issue in the climate discussions, but again the choice currently makes little difference to the fair shares of most countries. The most affected country would be China, benefitting from importer countries taking responsibility for the emissions embodied in the production and transportation of Chinese-made goods. These emissions can also compensate for some of the LULUCF emissions of major agricultural economies, which seems fair since it is largely external demand for agricultural commodities that drives deforestation.

Whether to include non-CO₂ greenhouse gases:

We choose to include all greenhouse gases rather than only CO₂, since non-CO₂ gases, notably methane (CH₄) and nitrous oxide (N₂O), are also important drivers of climate change.

Capacity

We use a country's share of global income as the measure of its capacity to provide international support for the response to climate change. However, we do not consider it fair to count each dollar of income of the poorest citizens of the world the same as each dollar of income of its richest, so we choose CERP's strong progressivity income setting. This does not count income below a "poverty threshold" of US\$7,500 (in purchasing power parity, or PPP, terms) per year (around US\$20 dollars a day) towards a country's capacity. It then gives increasing weight to an individual's income up to a "luxury threshold" of US\$50,000 per year (in market-exchange rate, or MER, dollars), at which point all of the additional income is counted towards the country's capacity. This system is just like a progressive income tax regime, which most countries apply and seem to

² <http://faostat.fao.org/site/705/default.aspx>

consider fair. Changing from the strong to medium progressivity setting for income (in which all income above the poverty threshold is counted equally) alone has a fairly significant impact on some countries, including the USA, whose RCI is increased by 33% with the 1850 baseline year and by 36% with the 1950 baseline year. On the other hand, choosing a more progressive setting, where income above the “luxury threshold” is multiplied by a factor greater than 1 to increase its contribution towards national capacity, hence shifting the burden further upwards onto the broadest shoulders, might seem even more equitable.

It can be observed from Annex II, Table 3 that changing from the combination of more equitable settings (1850 baseline and strong progressivity) to the combination of less equitable settings (1950 baseline and medium progressivity) hardly affects the 2020 fair shares of some countries such as Australia and Denmark, but increases the 2020 fair shares of France and the UK by around 20% and of the EU as a whole by around 30%, and decreases that of the USA by around 14%. This change means that Annex II countries’ combined RCI value drops from 77% to 65%, with the result that, if we fix their contribution at US\$50 billion, the total contribution from Annex II plus other HIC contributors (see above) rises from US\$55 to US\$59 billion. As mentioned above, ignoring emissions between 1850 and 1949 has little effect, but giving less relative weight to the income of the richest citizens means that much less of the burden is shouldered by the USA and more of it falls to some of the other Annex II countries (including some EU members and Japan) and to non-Annex II HICs with more recent growth spurts.

In 2025, changing from the more equitable settings (1850 baseline, strong progressivity) to the less equitable settings (1950 baseline, medium progressivity) increases the collective fair share of the EU and Brazil by around 20%, and that of Malaysia (a new contributor in this year) by over 110%. The fair shares of Australia and Denmark fall slightly, with that of the USA falling more - by around 20%. The total Annex II contribution falls by around 7%, leaving more for the non-Annex II HICs to make up.

Who should contribute?

Between 2020 and 2030, Africa’s combined RCI is around 1% and Denmark’s just over half of this, at around 0.5%. (In 2010, Denmark’s RCI was over two thirds of Africa’s.) Throughout this period, South Africa’s RCI makes up about half of Africa’s at around 0.5%, rising such that it only just falls short of Denmark’s in 2030. This example raises a series of questions regarding which countries should be expected to contribute to international climate finance. First, should all countries contribute their fair shares of adaptation finance, at least for developing countries, exactly in accordance with their RCI? This would mean that Africa would collectively provide 1% of adaptation finance between 2020 and 2030, twice as much as Denmark. This does not seem or appropriate, given the development challenges that Africa faces and its urgent need for development and adaptation finance.

So, a second question might be whether current Annex II countries should remain fixed as the group of contributors through to 2030. Given the rate of development of some of the current developing countries and the rate of increase in their shares of cumulative emissions, a system that reflects the graduation of such countries from developing country status seems fairer and more appropriate as a way of sharing the collective burden - though only if a fair shares approach is adopted.

As a first attempt to define such a dynamic means of categorising contributor countries, a third question that might arise is whether a threshold value for a country's RCI could be established, above which all countries would contribute their fair shares, adjusted to make up the missing contributions of countries below this threshold. Since Denmark and South Africa have almost the same RCI values between 2020 and 2030, such an approach would be likely to mean that either both or neither of these countries should contribute. Given the above-mentioned GNI per capita and poverty levels, it does not seem fair or appropriate that these two countries be treated as equivalent in terms of their responsibility and capacity to contribute to climate finance. Some other measure of capacity seems necessary as a threshold for a country becoming a contributor. The fact that Africa, were it a single country (with all the same development challenges and poverty that it has as a collection of countries), would be a contributor and expected to contribute twice as much as Denmark (a long industrialised, rich, developed country), if only RCI were used to determine contributors also suggests that this is not a fair or appropriate approach.

In light of the above reasoning, a fourth question suggests itself: could a measure of income per capita be part of a set of criteria for determining when "upper-middle-income countries" or "emerging economies" like South Africa (and Brazil, China etc.) should graduate into the category of contributors? While no widely accepted definition of developed country exists, the most widely used currently is probably the World Bank's category of high-income countries (HICs: see Annex III), defined as those countries with a GNI per capita over a threshold, currently set at US\$12,736, calculated using the World Bank's Atlas method. Since it does not seem appropriate for ODA-eligible countries to be contributing to international climate finance, we might adopt, as a minimum, the OECD DAC's cushion of three years as a HIC (which is the point after which a country is no longer eligible for ODA) to determine when a country might potentially be considered a contributor. A country would need sufficient time to prepare for becoming a contributor, so in practice the set of contributors might be updated every five years - with new contributors only expected to start contributing in five years' time. As discussed in Annex III, additional criteria such as poverty rates and the projected impact of climate change on a country's development and poverty levels should also be taken into account on a case-by-case basis.

Returning to our example of South Africa, according to the World Bank this country had a GNI per capita of US\$6,800 in 2014, calculated using the Atlas method. If we apply the USDA Economic Research Service's projected growth rate (the most consistent set of credible projection rates we could find) in GDP per capita from 2014 onwards³ to this World Bank GNI per capita figure, we find that South Africa is projected to cross the HIC threshold in 2029. Hence we would not include it as a contributor even in 2030. However, it is a borderline case on this criterion alone. If we were to then look at national poverty rates, we find that, according to the World Bank, its poverty headcount in 2010 was 54%, using its national poverty line. Continuing this line of thought, we might ask whether, if at some point South Africa became a HIC and still had a very high poverty rate, it would be fair to expect it to start contributing to the adaptation costs of developing countries or whether it should be using this money to tackle domestic poverty and inequality. Could

³

http://www.ers.usda.gov/datafiles/International_Macroeconomic_Data/Baseline_Data_Files/ProjectedRealPerCapitaGDPValues.xls

the government be expected to redistribute wealth within its own borders as well as across its borders? Even if it could, what if it wasn't doing the former? Such questions require further analysis and discussion; in this report, we adopt a conservative approach to such borderline cases. The important point is that these criteria should be dynamic, in that they do not prescribe two fixed groups - countries that should contribute and countries that do not need to - but rather transparent thresholds that countries will eventually cross on their development pathways.

The approach we adopted for this report means that Brazil would be projected to become a contributor by 2025 and China by 2030, unless GDP per capita growth slows significantly compared to projections. It also means that, since Bulgaria and Romania are members of the EU28 but not HICs now, nor projected to become so by 2025, the fair shares presented for the EU (as a group) for 2020 and 2025 are those corresponding to the sums of the fair shares of the other 26 EU member states. By 2030, Romania is projected to be a contributor, so the EU's collective fair share in this year now includes all 28 members bar Bulgaria. Below is a summary of the projected contributors from 2020 to 2030.

Contributors in 2020 would be, subject to exceptions on the basis of poverty levels etc., all current HICs (i.e. HICs as of 2015) – though in our calculations of 2020 fair shares, contributions by non-Annex II HICs are counted over and above the US\$50 billion goal, since we consider that target (derived from the US\$100 billion per year commitment made at the UNFCCC in 2009) the responsibility of Annex II countries only.

- This means that current Annex II countries would be joined by countries such as Croatia, Czech Republic, Hungary, Monaco, Oman, Poland, Russia, Saudi Arabia, Slovak Republic, Slovenia, Qatar and UAE, as contributors over and above the US\$50 billion goal.
- Borderline cases include Argentina and Venezuela, whose classification as HICs may be highly dependent on the choice of and changes in exchange rates used for calculating their GNI per capita, and for whom there may be additional development criteria that might constitute a case for their not being included (Venezuela's poverty rate, according to the World Bank, is over 25%).
- Furthermore, Barbados is currently a HIC, but is also one of the V20: the 20 countries most vulnerable to climate change impacts. In principle, countries that have high historical responsibility for climate change and the economic capacity to contribute to adaptation costs should deliver their fair share regardless of their own vulnerability to climate change. However, certain countries, even HICs or those projected to become HICs, might need to be excluded from the contributor category if their vulnerability to climate change threatens their HIC status and their capacity to address their own vital adaptation needs. We note that Barbados' fair share in 2020, if considered a contributor, would be around US\$2 million, or approximately 0.004% of its GDP.

New HIC contributors in 2025 are projected to be Brazil, Kazakhstan, Malaysia, Palau (though see below, due to climate vulnerability), Panama, and Suriname (though see below, due to climate vulnerability).

- Brazil would only need 0.6% growth in GNI per capita in order to classify as a contributor in 2025 on the criterion of having three consecutive years with HIC status alone.
- Kazakhstan is projected to be a HIC by 2019-2022.

- Malaysia is projected to become a HIC by around 2018 (and the joint World Bank/Malaysia aim is to become a HIC by 2020⁴).
- Palau would become a HIC by 2022 with only 1.7% annual growth in GNI per capita, well below recent trend, so on this basis should be a contributor in 2025. Becoming one may be symbolic, however, given the threat to this island nation posed by climate change. It's fair share in 2025 would be US\$340,000, or 0.09% of GDP.
- Panama would become a HIC in 2020 with only 1.7% annual growth in GNI per capita.
- Suriname, were it to continue its current trend, would become a HIC by around 2018-2021 (e.g. the latter date is derived by applying the IMF's projected growth rate for GDP per capita for 2013-2020 to the World Bank's 2013 value for GNI per capita). However, Suriname is expected to be hit hard by climate change, and in the worst-case scenario would probably drop down out of HIC status by 2030, so if Suriname were to make a contribution to the adaptation costs of other developing countries it might be purely symbolic - in practice it could be used for adaptation in Suriname. Suriname's fair share in 2025 would be US\$3.5 million, or 0.04% of GDP.
- Turkey is projected to become a HIC around 2022 (the World Bank also stated in January 2015 that Turkey could become a HIC in five years⁵).
- Lebanon is projected to be HIC by around 2020. However, in light of conflict, the impact of the ongoing refugee crisis and its high poverty rate, we do not include it as a contributor.
- Mauritius would become a HIC by 2022 if it maintained its current trend, so it could potentially be a contributor in 2025, but given the projected impacts of climate change represent a significant threat to its economic growth, we do not include it as a contributor for the illustrative purposes of this report.

New HIC contributors in 2030 are projected to be China, Mexico, Romania, and Turkmenistan.

- China would require only 4% growth in GNI per capita from 2014 to become a contributor in 2030 (and 8% to become a contributor by 2025). However, there is much uncertainty about the ability to maintain 8% growth in GNI per capita and China itself foresees itself becoming a HIC by around 2025⁶, while the WB says much reform is required to reach HIC status by 2030⁷, so we include it as a contributor only in 2030.
- Mexico is projected to become a HIC by 2025.
- Romania is projected to become a HIC around 2023.
- Turkmenistan is projected to become a HIC by 2020, but growth projections recently lowered due to drop in oil prices and other factors, leading the World Bank to state in October 2015 that Turkmenistan could still become a HIC within the next decade,⁸ so we include it as a contributor only in 2030.
- The Maldives, were it to continue its development trend, would become a HIC by around 2026, so possibly a contributor in 2030, but due to the uncertainty and likely impact of climate change on its economy, we do not include it.

⁴ <http://www.worldbank.org/en/news/press-release/2015/10/01/malaysia-and-the-world-bank-group-ink-final-agreement-to-open-new-world-bank-group-office-in-kuala-lumpur> and <http://www.thestar.com.my/Business/Business-News/2013/07/03/World-Bank-Malaysia-set-to-be-high-income-nation/?style=biz>

⁵ <http://uk.reuters.com/article/2015/01/12/uk-turkey-economy-worldbank-idUKKBN0KL1HM20150112>

⁶ http://www.chinadaily.com.cn/business/2015-06/11/content_20973228.htm

⁷ <http://www.worldbank.org/content/dam/Worldbank/document/China-2030-overview.pdf>

⁸ <http://pubdocs.worldbank.org/pubdocs/publicdoc/2015/10/427111444311375942/Turkmenistan-Snapshot.pdf>

Estimating adaptation finance provided in comparison to fair shares

How we estimated grants for adaptation

Countries report every two years to the UNFCCC on how much climate finance they have provided. The biennial reporting for 2013-2014 has not yet been completed, so 2011-2012 is the most recent for which countries have reported. However, OECD DAC members (plus the UAE) report annually on their development finance, and this group of countries includes all of the Annex II countries. They use a system of "Rio markers" to identify which of their development cooperation activities - and therefore how much of their development finance - they consider to contribute to various environmental objectives (those of the "Rio Conventions") either as the principal objective or a significant objective. The five Rio markers are climate change mitigation, climate change adaptation, biodiversity, desertification and environment (in general).⁹ In fact, an activity can have more than one principal objective identified.

We considered the OECD's project-level database of climate-related development finance in 2013 (the most recent year available) to be the best available source of information.¹⁰ This indicates, for each project reported by OECD DAC members (and the UAE) as having either adaptation or mitigation as an objective, the amount of development finance provided, the type of financial instrument (grant, concessional loan, non-concessional loan, equity) and the Rio markers, as well as other information about the project. Finance given as core contributions to multilateral development banks, UN organisations and climate funds that can be attributed to OECD DAC members and expenditure on climate change is also included. Indeed, this is a more useful source of information than the biennial reporting to the UNFCCC, since there is a wide variety of practices regarding how much of the finance for projects with a climate change objective is counted in the reported flows of "climate finance".

Note that we did not use the first round of pledges to the Green Climate Fund (GCF) as a basis for comparing adaptation finance provided with countries' fair shares. These initial pledges are generally for the GCF's four-year "Initial Resource Mobilization" period of 2015-2018, so they do not match up with the 2013 data we use. In any case, even if we assume that half of each country's GCF pledge will be allocated to adaptation (this is the GCF's policy aim), the amounts are generally very small compared with adaptation finance actually disbursed in 2013.¹¹ The GCF pledges are not useful indicators for broader trends in levels of adaptation finance, since i) a significant proportion of adaptation finance is likely to continue to be routed through other mechanisms; and ii) the resourcing of the GCF is still in quite early days and countries are now starting to focus on 2020 pledges. We do comment on the most recent pledges for 2020 by France and the UK in Part III of the report and below.

As we have remarked throughout the report, we only count grants, not loans, in accordance with the principles of climate justice. This means that all of the adaptation finance we looked at was in fact double-counted as ODA: a practice with which we disagree, but standard practice nonethe-

⁹ <http://www.oecd.org/environment/environment-development/rioconventions.htm>

¹⁰ <http://www.oecd.org/dac/stats/climate-change.htm>

¹¹ <http://news.gcfund.org/wp-content/uploads/2015/04/Status-of-Pledges-2015.10.18.pdf>

less. We decided to include, in addition to 100% of grants for projects which have adaptation marked as a *principal* objective, 30% of grants for projects which have adaptation marked as a *significant* objective. This seems reasonable in theory since there will be development projects (e.g. infrastructure) where adaptation is incorporated as a component of a project that seeks to climate-proof its development intervention, rather than as the main objective of the intervention. Counting 30% of such projects is consistent with the conservative end of country reporting procedures: Australia and New Zealand attempt to identify the climate-related component of project finance (using an “activity-led coefficient”), but failing this use 30%; Spain uses 20% if one of mitigation or adaptation is a significant objective and 40% if both are. Other countries count up to 100% of finance for projects where adaptation or mitigation is only a significant objective.¹² In practice, 30% is generous since analysis of even the projects marked as having adaptation as a principal objective soon reveals that in some cases the link to adaptation is tenuous at best.

Furthermore, there are many projects that have both adaptation and mitigation marked as joint principal objectives. We generously included 100% of such finance, since in theory we would like to promote synergistic interventions, where these are carefully crafted to meet multiple development objectives without significant adverse impacts. However, had we counted only 50% of such finance, the levels of adaptation finance provided by some countries would drop significantly - in Denmark's case by around a third.

Since the US data on climate-related development finance in 2013 is not yet disaggregated into different financial instruments (e.g. grants and loans), we assumed that the USA's 2013 adaptation finance was split between grants and loans in the same proportions as its total ODA for 2013, for which this data is available.

Imputed multilateral ODA for adaptation

As mentioned in Annex III, a total of US\$0.7 billion of ODA that was disbursed through multilateral development banks or climate funds or the UNFCCC from core contributions made by OECD DAC members. We include this in spite of the fact that some of it may have been disbursed in concessional loan form, since the contribution from the countries was in grant form and we cannot be sure how it was disbursed. This actually represents 15% of the total adaptation finance flowing from developed to developing countries in grant form and a significant proportion of the adaptation finance provided by countries such as France, the UK and the USA. Hence further investigation is warranted into how it is disbursed and attributed to contributor countries. In this report, for lack of more detailed information, we took the OECD's figure for the percentage of total multilateral climate finance in 2013 - which, unlike our report, includes both concessional and non-concessional finance - used for either adaptation (19%) or both adaptation and mitigation (3%), i.e. 22%, and applied this percentage to the total imputed multilateral climate-related ODA attributable to each contributor country. (These amounts add up to US\$0.7 billion for adaptation out of a total of US\$3.4 billion for climate change.)¹³

¹² *Climate Finance in 2013-2014 and the USD100 billion goal*, OECD-CPI

¹³ http://www.oecd.org/dac/environment-development/Climate-related%20development%20finance_June%202015.pdf

Concessional loans for adaptation

A further grant-equivalent sum of at least US\$0.3-0.4 billion was provided in concessional loans, applying a grant element of 25% to concessional loans (which is the minimum, by definition) and with lower and upper ends of the range calculated as for the grants. However, we do not include any part of concessional loans in our concept of adaptation finance.

Comparing new pledges with fair shares

In September, both the UK and France made new pledges of climate finance for 2020. As discussed in Part III of the report, they did not provide sufficient details to allow comparison with their fair shares with certainty.

In the UK's case, *if* all of the pledged amount were disbursed *in grants*, then it would amount to 54% of the UK's fair share of adaptation finance in 2020. However, as mentioned in Part III of this report, if only 20% of the pledged amount is given in grant form, as was the case for the UK's previous pledge to the GCF, then it will amount to only 11% of the UK's fair share. If, on the other hand, the pledged amount is distributed between grants and loans and between mitigation and adaptation exactly as was the UK's climate-related development finance in 2013, then it would represent 30% of the UK's fair share in 2020.

It is possible that the UK's climate finance pledge does not include its imputed multilateral climate ODA and that this will also be provided in 2020. If we now add the UK's imputed multilateral ODA spent on adaptation, using the 2013 value, the pledge, if it follows the pattern of the previous GCF pledge, would amount to 19% of the UK's fair share. *If* half of the pledged amount were to be provided *in grants* to adaptation, adding the 2013 imputed multilateral contribution would bring the total to 62% of the UK's fair share. If the imputed multilateral adaptation contribution is scaled up with GDP between 2013 and 2020 (i.e. if we assume the UK's core contributions to multilateral banks, funds and secretariats are proportional to GDP and that the same percentage of these are spent on adaptation in 2020), then the total would amount to 22% of the UK's fair share assuming the grant component is as per its previous GCF pledge and 65% of the UK's fair share if all of the adaptation component is disbursed in grants. Hence, making different assumptions, we can derive values from 11% to 65% of the UK's fair share in 2020 from the headline pledge made, but without further commitments, it seems reasonable to assume that this pledge will follow the pattern of recent ones and unreasonable to assume that all of the adaptation component will be provided in grant form.

Current high-income countries, with Annex II countries in bold

Andorra
Antigua and Barbuda
Argentina
Aruba
Australia
Austria
Bahamas, The
Bahrain
Barbados
Belgium
Bermuda
Brunei Darussalam
Canada
Cayman Islands
Channel Islands
Chile
Croatia
Curaçao
Cyprus
Czech Republic
Denmark
Estonia
Equatorial Guinea
Faeroe Islands
Finland
France

French Polynesia
Germany
Greece
Greenland
Guam
Hong Kong SAR, China
Hungary
Iceland
Ireland
Isle of Man
Israel
Italy
Japan
Korea, Rep.
Kuwait
Latvia
Liechtenstein
Lithuania
Luxembourg
Macao SAR, China
Malta
Monaco
Netherlands
New Caledonia
New Zealand
Northern Mariana Islands

Norway
Oman
Poland
Portugal
Puerto Rico
Qatar
Russian Federation
San Marino
Saudi Arabia
Seychelles
Singapore
Sint Maarten (Dutch part)
Slovak Republic
Slovenia
Spain
St. Kitts and Nevis
St. Martin (French part)
Sweden
Switzerland
Taiwan, China
Trinidad and Tobago
Turks and Caicos Islands
United Arab Emirates
United Kingdom
United States