

Phasing out fossil fuels, supporting climate justice



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Introduction

Most governments have stated publicly that the climate crisis is existential, yet they are failing to take substantive enough action to curb greenhouse gas emissions¹. When action is taken, it is often piecemeal in nature, doing little or nothing to prevent emissions that are saved in one sector or region from being generated elsewhere instead (the 'rebound effect')².

The UNFCCC climate negotiation process is consensus-based and its efforts are continually watered down by countries under the influence of fossil fuel companies. As a result, over 25 years have gone by with very little to no progress. Global emissions keep on rising steadily - and those countries which are the least responsible for the climate crisis often prove to be the ones which are suffering the most damage from it³.

We clearly need climate action which is systemic enough to prevent the rebound effect and which strongly supports global justice. This paper suggests a way of achieving that by building on the work of the already-existing Beyond Oil and Gas Alliance and using it as a springboard to implement a justice-based emissions-cutting programme called Cap and Share.

Fossil fuel phase-out and the Beyond Oil and Gas Alliance (BOGA)

BOGA was launched in November 2021 during the UN climate Conference (COP-26) in Glasgow, Scotland. Its six full member countries - Denmark, Costa Rica, France, Greenland, Ireland and Sweden - have pledged to phase out their production of oil and gas in line with the terms of the Paris Agreement. This pledge not only prevents them from licensing new fossil fuel production, but should also oblige them to phase out any existing production that would otherwise continue beyond 2050.

This is a welcome step forward. As a September 2022 briefing paper on BOGA by Oil Change International states, '[BOGA] marked the first time governments formed a diplomatic alliance explicitly aimed at keeping oil and gas in the ground...after decades of international climate policy focused almost entirely on regulating demand for fossil fuels, the creation of BOGA signaled that a more comprehensive approach to tackling carbon lock-in [is] urgently needed and gaining traction'.⁴

BOGA provides support for the goals of [Fossil Fuel Non-Proliferation Treaty](#), which has been endorsed by 100 Nobel laureates and many organisations including Greenpeace, Amnesty International and 350.org, and which calls for a global phase-out of fossil fuel production in order

¹ <https://ourworldindata.org/co2-emissions> 2020 saw a dip in emissions because of the COVID-19 pandemic, but the general trend has been for them to increase steadily over the past few centuries, and particularly the past few decades. .

² See for example <https://attheu.utah.edu/facultystaff/human-behavior-sabotages-co2-reducing-strategies/> <https://www.carbonbrief.org/guest-post-why-rebound-effects-may-cut-energy-savings-in-half/>

³ <https://fridaysforfuture.org/newsletter/edition-no-1-what-is-map-a-and-why-should-we-pay-attention-to-it/>

⁴ <https://priceofoil.org/content/uploads/2022/09/BOGA-CSO-Expectations-Paper-1.pdf> p3

to meet the targets of the Paris Agreement⁵. If fossil fuel extraction is phased out on a global level, and if other measures are introduced to encourage the transition to renewable energy use, then that will help to solve the problem of rebound.

Other noteworthy elements of BOGA's creation include the partnership between a group of Global North countries and Costa Rica, a Global South country, and the fact that their first announcement took place during a UNFCCC event (the COP). Denmark and Costa Rica were the two founding BOGA members that hosted the BOGA announcement event. Whether intentional or not, this implicitly provided a template for countries to bypass the UNFCCC's "all or nothing" consensus approach (which has thus far resulted in mostly nothing), by encouraging pairs or small groups of countries in the Global North to find partners in the Global South, thus creating a template for a new institution to address global climate change that adopts a set of principles and can grow country-by-country or region-by-region to take action. In the same vein, the announcement of BOGA at a side event of the COP-26 was also important, since the UNFCCC remains the primary platform for creating and enforcing norms around climate action. BOGA can continue to influence the conversations at future COPs without being constrained by the UNFCCC's restrictive process.

Although BOGA already has many positive attributes, it clearly has the potential to play a much larger role on the global level. Here are some of the issues that would need to be resolved in order to achieve that:

- Coal - a widely-used and highly polluting fossil fuel - needs to be included in the phase-out plan, as well as oil and gas
- Fossil fuel imports ought to be phased out in addition to fossil fuel production within the borders of the BOGA member countries
- 'Embedded' fossil fuel emissions in imported products ought to be factored in
- Given the fact that most BOGA countries are relatively wealthy, BOGA ought to develop a strategy for directly supporting global climate justice and providing substantial climate finance, in order to help accelerate the energy transition in poorer countries
- Finally, BOGA (or 'BOGCA', if it were to include coal in the future) needs to be considerably expanded

Now we'll look at a policy which the Feasta climate group is advocating, Cap and Share, and see how it could interact with BOGA to help meet the challenges listed above.

⁵ <https://priceofoil.org/2020/05/20/deep-dive-5-reasons-governments-must-act-now-phase-out-oil-gas-production/>

Cap and Share

Cap and Share would impose a *binding cap* on fossil fuel production or imports, *charge fossil fuel producers* or importers for permits to carry out their activity, and *distribute the proceeds* from those charges in a fair and empowering manner through a dividend or share to people, on an equal per-capita basis⁶.

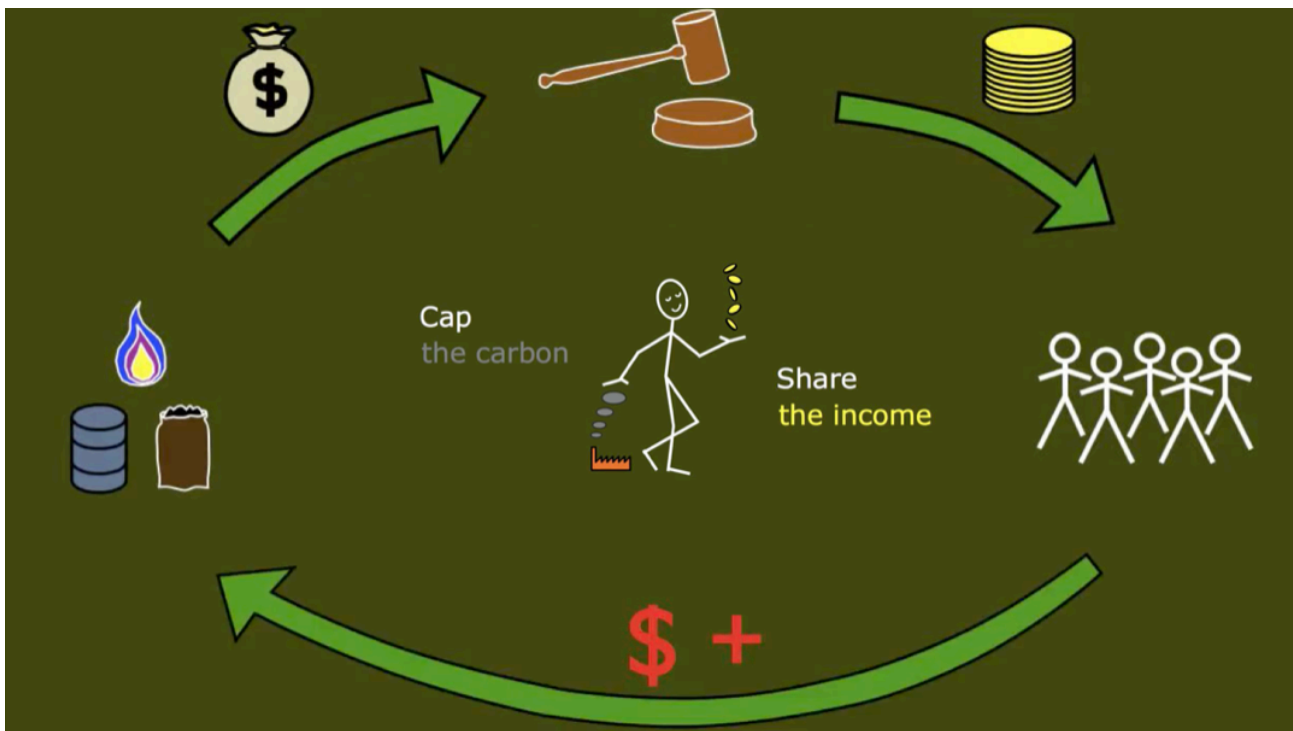


Fig 1: In Cap and Share, fossil fuel companies are obliged to buy a limited number of permits at auction in order to produce fossil fuels, and the proceeds from this permit sale are distributed on a per capita basis.

The 2022 report of the IPCC's Second Working Group mentions Cap and Share⁷ as an example of a policy mechanism that is rooted in the precautionary principle, reflecting the need to guarantee a substantive and lasting reduction in greenhouse gas emissions.

In a Cap and Share system, the cap on fossil fuel production and imports would be lowered each year, and the number of fossil fuel permits would therefore be reduced until eventually fossil fuel production would be eliminated. Meanwhile, the proceeds from the permit sales would have been distributed in a way that would empower people around the world to invest in their futures - for example, by giving them the option to develop community renewable energy projects, or by funding training and education - and, more generally, to combat poverty.

⁶ Cap and Share has a dedicated website which includes a short video explanation here: <http://www.framespotting.com/capandshare/> Extensive background information on Cap and Share can be found here: <https://www.Feasta.org/category/documents/projects/cap-and-share/> There is a debate as to whether it would be better to distribute 100% of the revenue from the permits directly, or to keep some or all of it aside in a fund for future generations, as is suggested here (for example): https://www.worldbasicincome.org.uk/uploads/7/8/9/3/78930716/international_carbon_charge_and_dividend_-_final.pdf . Participatory budgeting would be another option.

⁷ 'Impacts, Adaptation and Vulnerability', 2022, IPCC Working Group III, Chapter 1, p68

By focussing ‘upstream’ on the supply of fossil fuels into the economy, a global Cap and Share system (which we call CapGlobalCarbon) would ensure that every single greenhouse gas emission that originates from fossil fuel use would gradually be eliminated. In other words, it would prevent the rebound of fossil fuel-derived emissions.

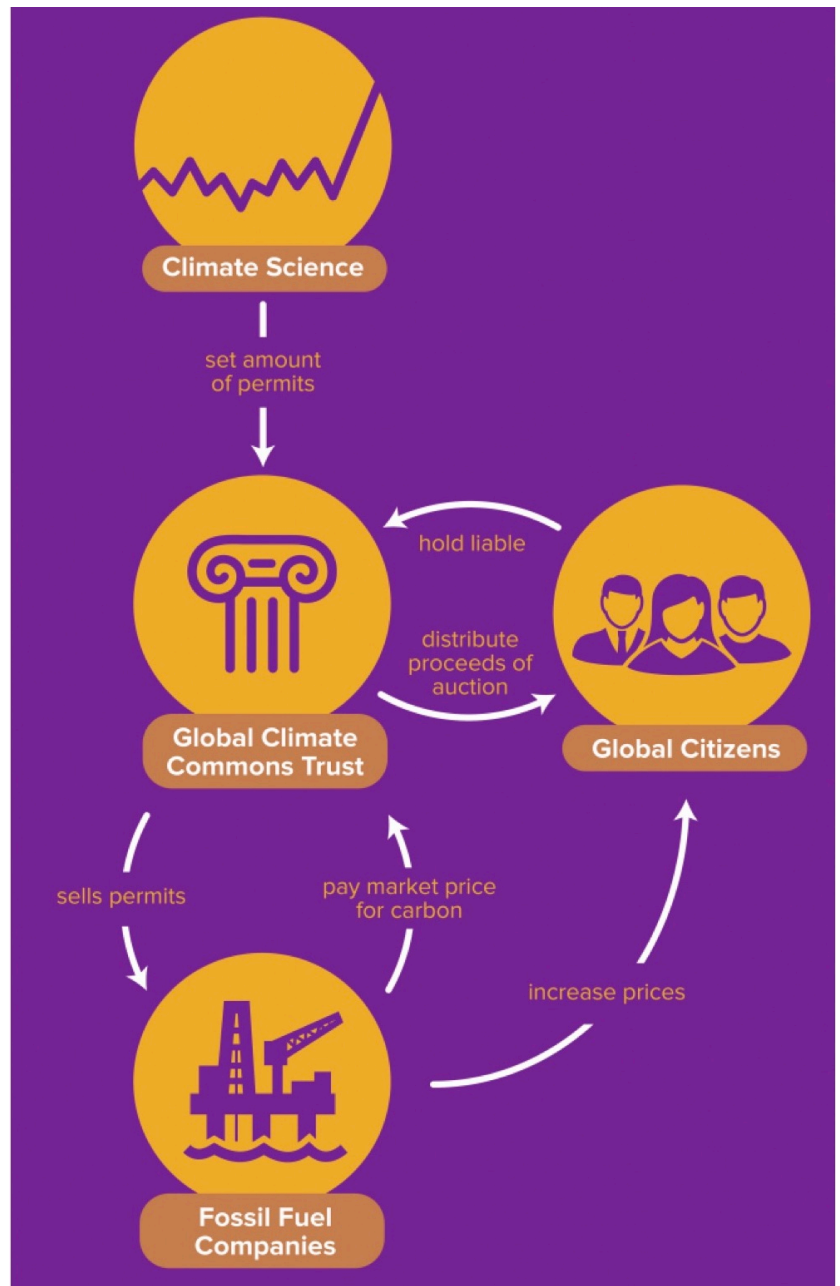
The focus on the supply of fossil fuels (or their import), rather than on the price of fossil fuel-derived emissions, is vital. As Brent Ranalli argues, the most important difference between a cap-and-permit based system such as Cap and Share and a carbon-fee-based system which does not include any direct restriction on the supply of fossil fuel is that

“a cap-and-permit system can be designed to accurately hit science-based carbon emission reduction targets. A carbon fee system cannot. We can only guess how high prices need to be set to hit emission reduction targets. Energy demand is notoriously inelastic, so it will take a large bump in price to get a little bit of emission reduction. With a cap-and-permit system, the emission reduction is guaranteed and the price will settle in the exact right place, with no guessing.”⁸

The distribution of the proceeds from the sale of fossil fuel permits should help to accelerate the energy transition and alleviate poverty around the world.

But for Cap and Share to do its job - and eventually become CapGlobalCarbon - it will obviously need to be able to function effectively across borders, since otherwise one country’s emissions cuts could simply be canceled out by another’s increased fossil fuel use, in another form of rebound.

A global Cap and Share system: CapGlobalCarbon



CapGlobalCarbon is a proposed global-level system for eliminating fossil fuel production, which incorporates Cap and Share and is administered by a Global Climate Commons Trust. More information can be found at <http://www.capglobalcarbon.org>

⁸ <https://www.Feasta.org/2021/02/20/a-primer-on-carbon-pricing-for-the-u-s-a/>

Kickstarting the adoption of CapGlobalCarbon

So how can we get from the current situation, in which governments and other stakeholders disagree with each other about who is the most responsible for global heating and who is best placed to act on it, to a situation where the use of all fossil fuels is phased out, regardless of location?

Let's walk through a series of possibilities.

Suggestion 1: National Cap and Share

Probably the most obvious approach would be for every country to individually implement Cap and Share within its borders. If they genuinely did so, then this would certainly bring greenhouse gas emissions from fossil fuels down to zero.

But it is unclear how individual governments could be motivated to do it. It would simultaneously limit their country's own economic activity and complicate their trade with other countries. Neither of these things are politically enticing. It would also be difficult to monitor in the absence of an international oversight body.

It is true that several wealthier countries have implemented policies which bear some similarity to Cap and Share, but all of them also have significant differences with it. The EU formed an emissions "bubble" and operates the EU ETS, which is a kind of cap on some emissions. However, unlike Cap and Share, it focuses mainly on reducing emissions at the point of fossil fuel use ('downstream'), rather than tackling fossil fuels at their source ('upstream') as Cap and Share would. This makes it much harder to ensure that all emissions from fossil fuel can be included. The EU ETS also does not include any equivalent to the share.

The US, Canada, China, and others have forms of national or sub-national carbon pricing. Typically, proceeds from those programs are spent ("invested") on programs to reduce emissions, and the "Share" portion (or dividend, that returns funds back to people) is rarely implemented or only implemented in a very partial way⁹. Feasta is encouraging governments such as the EU and the United States to improve those systems by considering Cap and Share at the national or regional (EU) level.

However, from a global perspective, there is a key ethical problem with this go-it-alone approach, which is that it would 'bake in' many of the privileges currently enjoyed by high-emissions countries. Any high-income country that unilaterally implemented Cap and Share would start with relatively high per-capita emissions and would therefore be harvesting (or 'enclosing') all of the proceeds from the sale of the permits for those emissions. Meanwhile, if a low-emissions country implemented its own Cap and Share system, it would generate far less income from the sales of permits because it would not be using as much fossil fuel in the first place.

⁹ See https://carbonpricingdashboard.worldbank.org/map_data for an overview of carbon pricing systems and the use of carbon tax revenue around the world.

So a framework needs to be put in place that would systematically distribute a fair share of proceeds to the lower-income countries. Let's move on to a suggestion on that.

Suggestion 2: Contraction & Convergence

The Contraction & Convergence model developed by Aubrey Meyer and the Global Commons Institute is an example of this approach. Each country or group of countries is allocated a portion of the global cap based on their populations and per capita emissions use.¹⁰ However, the way they achieve the cap differs such that high per capita emitters “contract” and low per capita emitters “converge”¹¹ to per capita equity. After the convergence, all countries contract to the scientifically required global emissions level.

This would be a fairer way to manage the compensation for the emissions, as the lower income countries would get a much larger share of proceeds than in Suggestion 1's ‘go-it-alone’ system. Moreover, it incorporates global climate justice by allowing lower income countries to expand their fossil fuel use in the short term, particularly since kickstarting the energy transition requires a certain amount of fossil fuel use (as for example in the construction and transport of wind turbines and solar panels, and the retrofitting of buildings). This approach aligns with other analyses such as Climate Fair Shares¹².

However, as a global system, Contraction & Convergence was developed as a cap with all countries participating from day 1 of its existence. It is unclear how it would work with only a few countries participating. Suggestion 3, below, proposes a way to address this.

Panel: Shouldn't Global North countries phase out their fossil fuel extraction before Global South countries?

Some climate justice advocates¹³ argue that in order to achieve a just global transition to a decarbonised economy, those Global North countries which are currently producing fossil fuel need to bring their fossil fuel phase-outs forward by at least one or two decades, in order to allow enough time for any Global South countries which currently produce fossil fuel to make the fullest possible use of them.

¹⁰ One note on global per capita equity: thus far in the late 20th and early 21st century, China has driven the global average so what happens in China will change how countries above and below China's level relate to the global cap. It will be interesting to see how India relates to that as its population exceeds China's in the coming years.

¹¹ This would involve some initial expansion of their emissions, to reach an agreed global average.

¹² <https://www.foei.org/what-we-do/climate-justice-and-energy/climate-fair-shares/>

¹³ See for example https://www.research.manchester.ac.uk/portal/files/213256008/Tyndall_Production_Phaseout_Report_final_text_3_.pdf

This approach would help, at least somewhat, to redress historic and current injustices that Global South countries have suffered at the hands of the Global North (specifically relating to the fact that cumulative emissions are far more concentrated in Global North countries). It would provide more time to ensure that everyone in the Global South who needs access to energy would get it, enabling low-income people in the Global South to increase their standard of living over the next few decades.

However, not everyone who is advocating for climate justice agrees with this approach. One potential problem with it is that there is the same danger of fossil fuel infrastructure lock-in in the Global South as we have already encountered in the Global North. Rather than focussing on further developing fossil fuels in any jurisdiction, the argument can be made that it would be more advisable to focus mainly on developing renewables and to take a global approach.

Another potential problem is that since not all Global South countries have fossil fuel reserves, it is unclear whether their continued extraction would truly benefit other vulnerable communities, particularly those in 'Least Developed Countries'.

In this paper we are therefore proposing a slightly different approach to phasing out fossil fuels (with, however, the same important fundamental goals of providing universal energy access and helping to redress historical injustices.) Rather than requiring Global North countries to phase out their fossil fuel production earlier than Global South countries, we would instead require them to systematically share out both their remaining energy and any money derived from the sale of fossil fuel permits to their partner countries in the Global South, on the basis of population numbers and subject to external monitoring and verification (by the Climate Commons Trust described below).

This would ensure that they provide significant compensation in the form of both energy and money to their Global South partners. In exchange for this, the Global South partner countries would agree to only exploit any fossil fuels which they might possess under the same binding cap as the Global North countries.

It is entirely possible, depending on the way in which fossil fuel extraction permits are distributed, that this system would in fact result in a longer phase-out of fossil fuel in the Global South and a quicker phase-out in the Global North. But this distribution of the timing of fossil fuel extraction would not be automatically built into the system; instead, the share in Cap and Share, and the universal energy lifeline described below, would take on the key tasks of helping to ensure energy access, alleviate poverty and redress injustice¹⁴.

¹⁴This system would certainly not deliver complete climate justice - other measures would be needed for that - but it would help to empower those most affected by climate injustice, making it easier for them to claim their rights, e.g. through building their capacity for legal action. (Similarly, the alternative approach of a quicker Global North phase-out also would not deliver complete climate justice, but would also have an empowering effect for the Global South countries affected.)

Suggestion 3: a pooled Cap and Share system in an international ‘Cap and Share club’

As we’re moving on to a more detailed plan here, let’s break it down step by step. (If you find this section heavy going, feel free to skip it and go on to ‘Example One’ below, which covers the same ground using real-world examples.)

1. A group of countries with a range of income levels and emissions levels form a ‘Cap and Share club’ together, agreeing to support each other through the energy transition. As in the previous suggestion, in order to join the club a candidate member country would either need to have per capita emissions that are close to the world’s average emissions, or to find a partner candidate member country (or countries) with higher or lower emissions to ‘pool’ their emissions with, so as to bring them close to the global average.
2. Permits for the extraction and import of fossil fuel in all of the Cap and Share club member countries would be auctioned regularly, in a joint auction for all member countries, by an independent Climate Commons Trust¹⁵. A floor price would be established to ensure that the permits would bring in a minimum amount of proceeds per month. (If we use World Basic Income’s suggested minimum per capita basic income of \$30 per person per month¹⁶, this works out at around \$80 per ton of emissions¹⁷.) The cap on production would be monitored by independent inspectors with representatives from the countries involved.
3. The Climate Commons Trust would distribute proceeds from the permits between the countries on the basis of their population size. As already mentioned above, Feasta climate group members believe that the quickest and clearest way to support climate justice - and also provide much-needed climate finance - would be to distribute the proceeds directly to individuals on an equal per-capita basis. But other options also exist for the use of the proceeds¹⁸.

¹⁵ Another option would be for the governments of the member countries to nationalise all of the fossil fuel production within their borders and directly phase it out. However, the permit auction approach would be less vulnerable to political fluctuations (particularly since there would be an international component to it) and would also make it harder for companies - whether privately or state-owned - to profiteer from increased energy prices brought about by the cap on fossil fuels.

¹⁶ <https://www.worldbasicincome.org.uk/how-much-would-we-get.html>

¹⁷ This \$80 figure was calculated by estimating the total income needed (\$360 per person per year multiplied by 8 billion, i.e. the approximate world population) and then dividing this by the current approximate global emissions per year (36 billion tonnes). \$80 is somewhat less than the UN Global Compact’s recommendation of a minimum \$100/tCO₂e carbon price (a recommendation that is shared by many climate economists). It should be borne in mind however that the price of carbon in Cap and Share will not need to determine the environmental outcome, i.e., the emissions level; this task would be done by the cap on the fossil fuel supply. The price’s objective in Cap and Share would primarily be social, rather than ecological. It would ensure that the polluter pays and generate financial support for those who most need it.

¹⁸ These include its investment in a renewable energy fund that could potentially yield longer-term proceeds, which could then be distributed as dividends instead, in contrast with our suggestion which would provide a finite but immediate source of income. See for example this proposal from World Basic Income: https://www.worldbasicincome.org.uk/uploads/7/8/9/3/78930716/international_carbon_charge_and_dividend_-_final.pdf. Another possibility would be its inclusion in participatory budgeting.

4. Each year, the quantity of permits available would diminish as the cap was lowered. The floor price for the permits would be adjusted to provide the same minimum proceeds for as long as possible.
5. Additional measures would also be introduced to protect low-income people from the effects of the rising energy prices brought about by Cap and Share. Such measures would include energy retrofitting of housing, the installation of community heating, improved public transport infrastructure and support for more localised and diverse food production. They could be paid for, at least in part, by increases in taxation on the wealthy, including 'commons based taxation' such as land value tax and Financial Transactions Tax, and the introduction of levies on the use of luxury high-CO₂ products¹⁹.
6. To avert the risk that an increase in the energy price would make it impossible for low-income people to access energy, all of the participating countries should also put an energy access 'lifeline' guarantee in place for every resident ('Universal Basic Energy'²⁰). This would enable them to access a minimum amount of energy for free or at an affordable price. Energy pricing would then be telescoped, with an increase in unit prices according to the volume of energy used.
7. By 2050, fossil fuel production would no longer be permitted and there would therefore be no more proceeds from CGC. Other income streams such as that from the land value tax and Financial Transactions Tax would take over to provide a more permanent income to the populations of all the countries involved. (These could be part of a universal basic income.)

Example 1: New Zealand, Nicaragua and Norway

Now let's do a thought experiment by imagining how this system might play out in a partnership of three countries with differing per-capita income and emissions levels: New Zealand, Nicaragua and Norway.

If these three countries were to form a Cap and Share partnership together, their collective per capita emissions would approximate those of the global average²¹. They would then:

- (a) Invite the Climate Commons Trust to hold a joint auction regularly to sell permits to the fossil fuel producers and importers on their territories. The permits would start at the

¹⁹ Determining the exact source of these funds is outside the scope of this paper, but in passing it is worth noting the arguments of Stephanie Kelton and other Modern Monetary Theory advocates concerning the ability of governments to spend money into existence and to use taxation to forestall any potentially inflationary effects of this spending.

²⁰ <https://neweconomics.org/2022/09/families-will-be-over-3000-out-of-pocket-by-april-2023-without-further-govt-intervention>

²¹ Average global per-capita emissions in 2020 were 4.46 tonnes of CO₂, while average per-capita emissions of these three countries would be 4.73 tonnes. Source: <https://ourworldindata.org/co2-emissions>

current level of production and imports in the three countries and would have an expiry date, to ensure that they wouldn't be hoarded. In later rounds of auctions, their quantity would gradually be reduced. There would be an initial floor price for the permits of \$80 per metric ton of carbon dioxide.

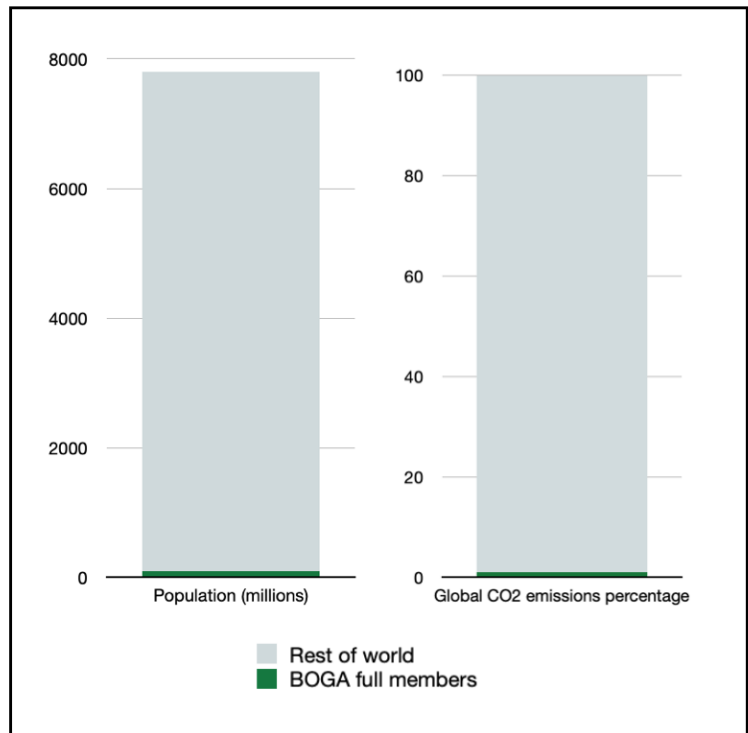
- (b) Fossil fuel companies would pass on the price of the permits to firms and consumers. While everyone would pay more for fossil fuel use, obviously the exact amount paid would depend on how much fossil fuel each person uses.
- (c) The Climate Commons Trust would pool the proceeds from the permits and then distribute it per-capita to residents of all three countries. Because of the \$80 per ton price floor for the permits, each household would be guaranteed at least \$360 (USD) per household member in the course of a year²². In the case of Nicaragua - which is the poorest country in Central America - this would increase the average per-capita income by around 19%²³. In the cases of New Zealand and Norway, which are richer countries, it would provide a modest financial support (particularly for lower-income households) but would need to be bolstered by state-funded energy-saving policies such as mass building retrofitting.
- (d) The cash would be accompanied by important information: people would need to know that fossil fuels were being phased out and to understand the basis for the cash transfers.
- (e) All three countries would also introduce an energy 'lifeline' system so as to ensure that everyone could access a minimum, basic amount of energy.
- (f) The injection of cash into households and communities in Nicaragua would increase effective demand for goods and services. However, there would be a disincentive to spend money on deprecated fossil fuel infrastructure or products which require a high use of fossil fuel, as (a) fossil fuel would be more expensive than before, and (b) everyone would also be aware that fossil fuels are being phased out. Research on existing cash transfer programmes suggests that this income would be used responsibly - treated as an investment - and would be an effective support to people living in poverty. Recipients could choose, if they wish, to pool their income so as to invest in community-owned renewable energy or other resilience-enhancing projects.
- (g) New Zealand and Norway would effectively be subsidizing the energy transition of Nicaragua, and helping to reduce poverty there, to the tune of at least \$2.4 billion per year.

²² See footnote 14 for an explanation of this figure.

²³ Based on the World Bank's data indicating that the average per-capita income in Nicaragua was \$1905 USD in 2020

Apart from Costa Rica and Greenland, all of the current full BOGA members are in the European Union. This means that they may face legal challenges if they attempt to directly control the flow of fossil fuels over their borders (as that could be interpreted as a barrier to the European Union's single market). It may partially explain why imports of oil and gas are not currently included in BOGA's phase-out plans. (Fossil fuel transportation infrastructure which is shared with other countries is another reason.)

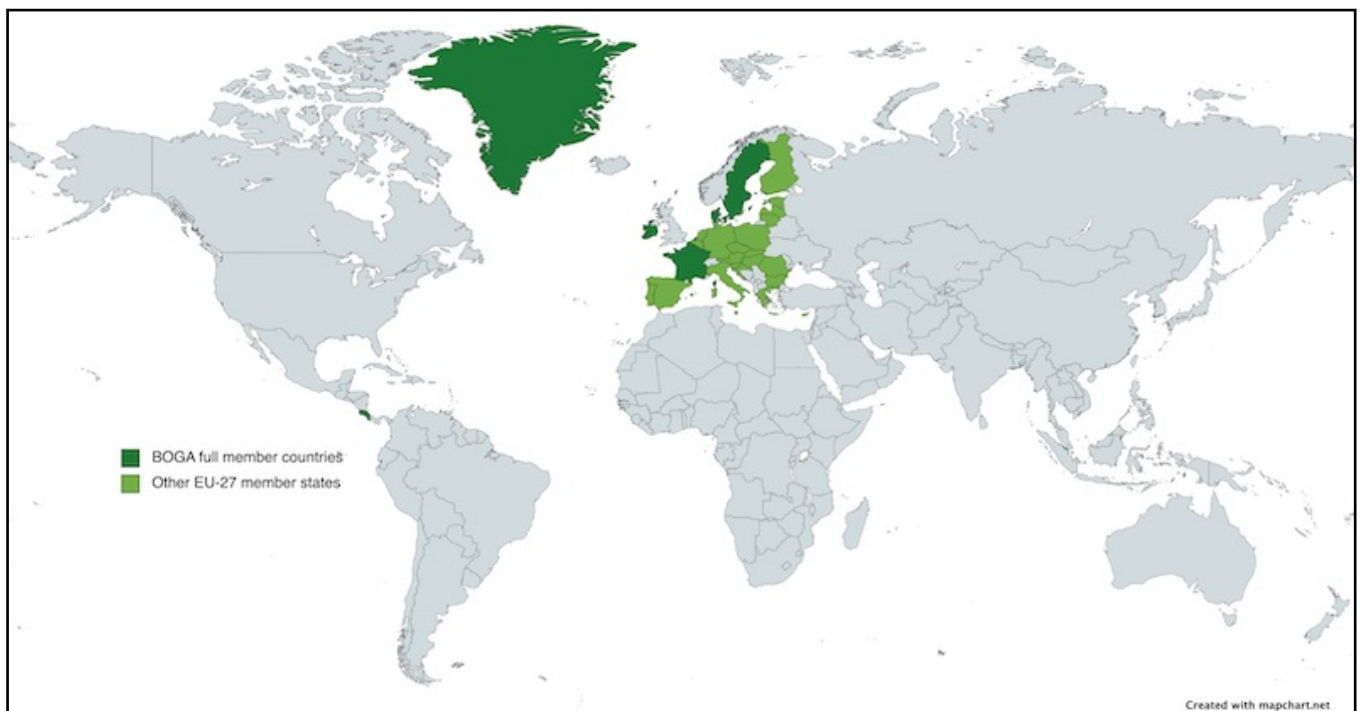
However, it is hard to see how BOGA - or BOGCA, if we include coal - could have a strong global impact if fossil fuel imports are not taken into account. Most of the BOGA member countries are not significant fossil fuel producers.



The most constructive way to address this would be to seek to expand BOGCA so that it includes all 27 of the EU countries (Fig 2). This would not only eliminate the possibility of legal challenges concerning the single market; it would also considerably increase BOGCA's impact on global emissions.

The EU is already developing a Carbon Border Adjustment Mechanism (CBAM) in order to try and prevent 'outsourcing' of its emissions to non-EU countries. While it will never be able to track

Fig 2: BOGA/BOGCA member countries and the EU-27



down and eliminate every single ‘outsourced’ emissions, CBAM will nonetheless help to deal with the issue of embedded emissions in imported products. In an expanded BOGCA, the CBAM would obviously need to include the non-EU BOGCA members. As more countries joined the Cap and Share club, the CBAM’s role would become steadily less important, and in a ‘full’ CapGlobalCarbon scenario, it would no longer be necessary at all²⁶.

We can see in Fig 2 that the BOGA and EU-27 group’s collective per capita emissions are somewhat greater than the world average, at 5.77 tonnes²⁷ ²⁸. In order to enable the scale-up towards CapGlobalCarbon and provide sustained support for climate justice, they will therefore need to find a group of lower-emissions partners.

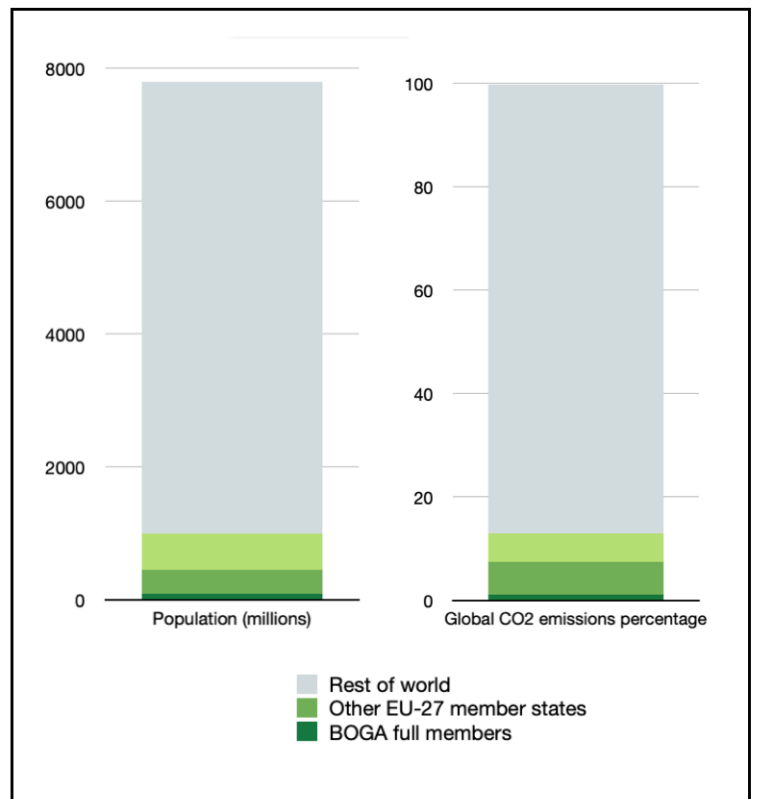
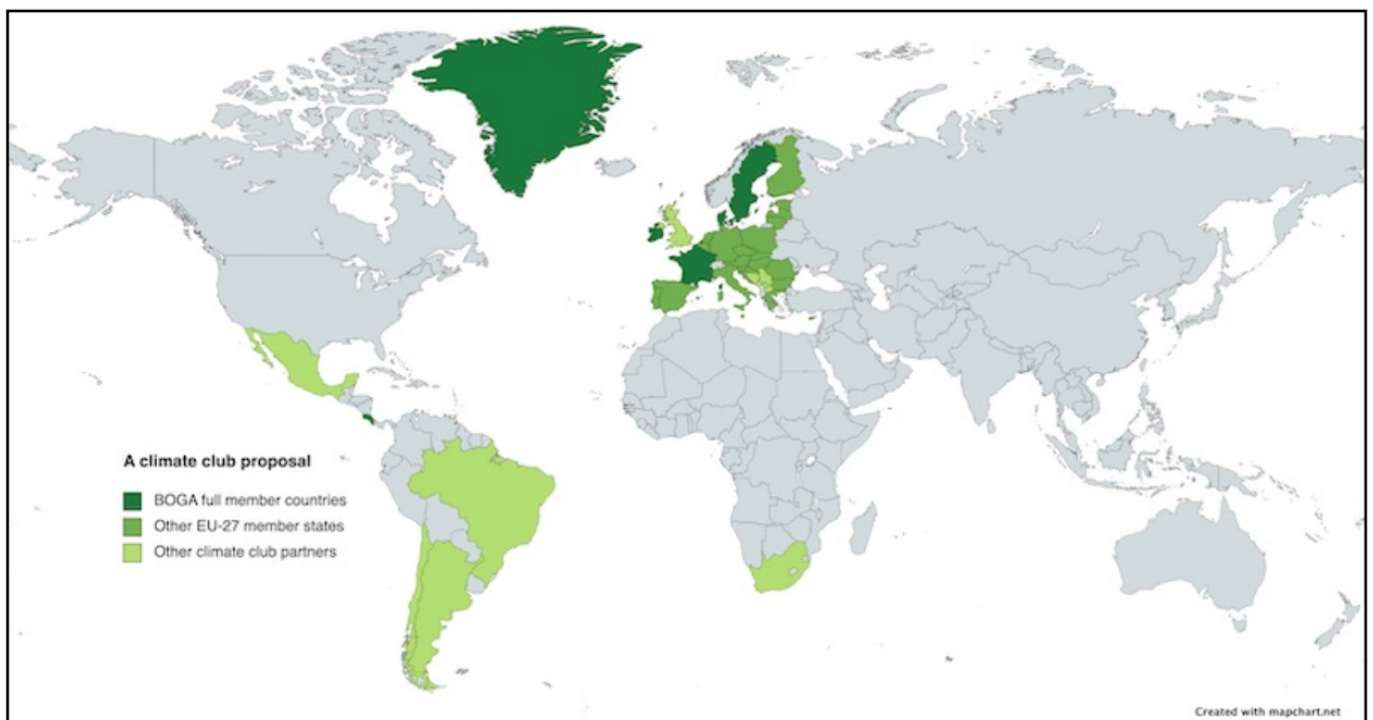


Fig 3: BOGA/BOGCA member countries, the EU-27, and partner countries



²⁶ For further discussion of the long-term role of the CBAM, see <https://www.Feasta.org/wp-content/uploads/2021/06/Feasta-CBAM-position-paper.pdf>

²⁷ All emission and population data in this paper are taken from the World Bank’s database: <https://ourworldindata.org/co2-emissions> The figures are from 2020. Embedded emissions are not included because these would be dealt with by the CBAM in the short term (albeit imperfectly), and by a global cap on emissions in the longer term (more comprehensively).

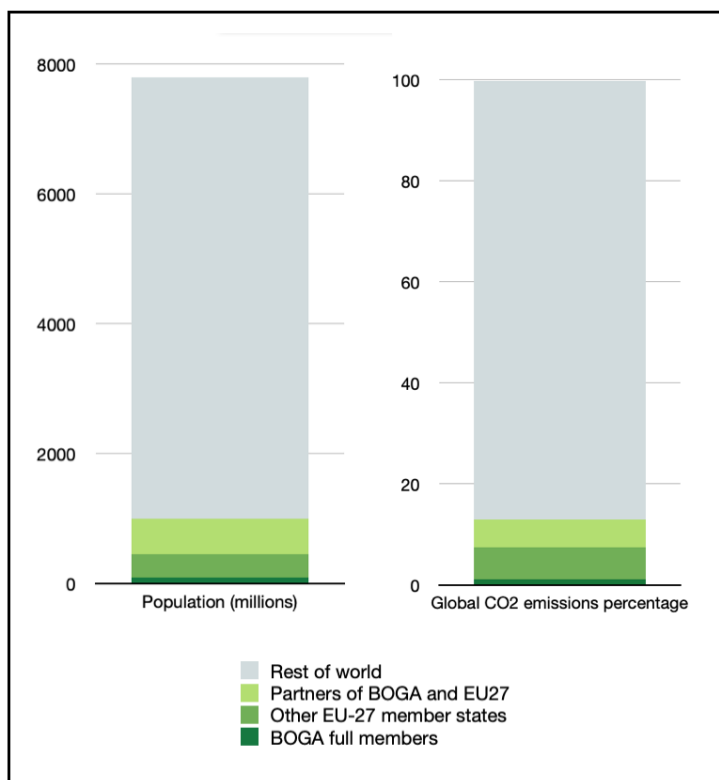
²⁸ The global average at the time of writing was approximately 4.5 tonnes per capita.

Potential partners for the EU and BOGCA

The countries in pale green in Fig 3 would, collectively, be potential candidates for joining with the EU 27, Greenland and Costa Rica in an expanded BOGCA Cap and Share club. (Other groups of countries could work too; this is just intended as an example.)

Part of what makes this particular collection of countries interesting is that it includes some significant regional powers in Latin America. For example, Brazil would be a valuable member of the club. One reason for this is that its membership would significantly support protection of the Amazon rainforest. Another is that some EU farming groups have expressed concern that if they are obliged to comply with environmental

regulations while Brazilian producers are not, then their products could be undercut by Brazilian agricultural products ('carbon leakage'). It is important to work collaboratively to address this concern, and the Cap and Share club would make that far easier.



Any country joining the Cap and Share club would be signing up for a phase-out of fossil-fuel-based inputs on all farms within the club. Other environmental regulations could also be included as part of the deal.

One might wonder why Brazil and the other Global South countries might wish to be included in such a partnership. One reason is that they would be exempt from the CBAM when trading with other partner countries. Another is that - as with Nicaragua in the example above - their membership would automatically provide them with a significant amount of climate finance.

Brazil's average per-capita income was approximately \$7500 in 2021. So the additional \$360 per year provided by the Cap and Share club may not seem like a big income boost - it represents an increase of around 4%. However, this general figure does not take into account the extreme extent of income inequality in Brazil. The average income of the poorest 50% of the Brazilian population - around 105 million people - was just \$1864 in 2019²⁹. Their income would therefore increase by an average of 19% if Brazil were to join the Cap and Share club.

²⁹ <https://www1.folha.uol.com.br/internacional/en/business/2019/10/income-gap-between-rich-and-poor-reaches-record-in-brazil.shtml>

Those countries in pale green that border on the EU in Fig 5 - the UK and three former Yugoslavian countries which are not currently EU members - would be relatively easy to incorporate into the partnership because of their close geographical location³⁰.

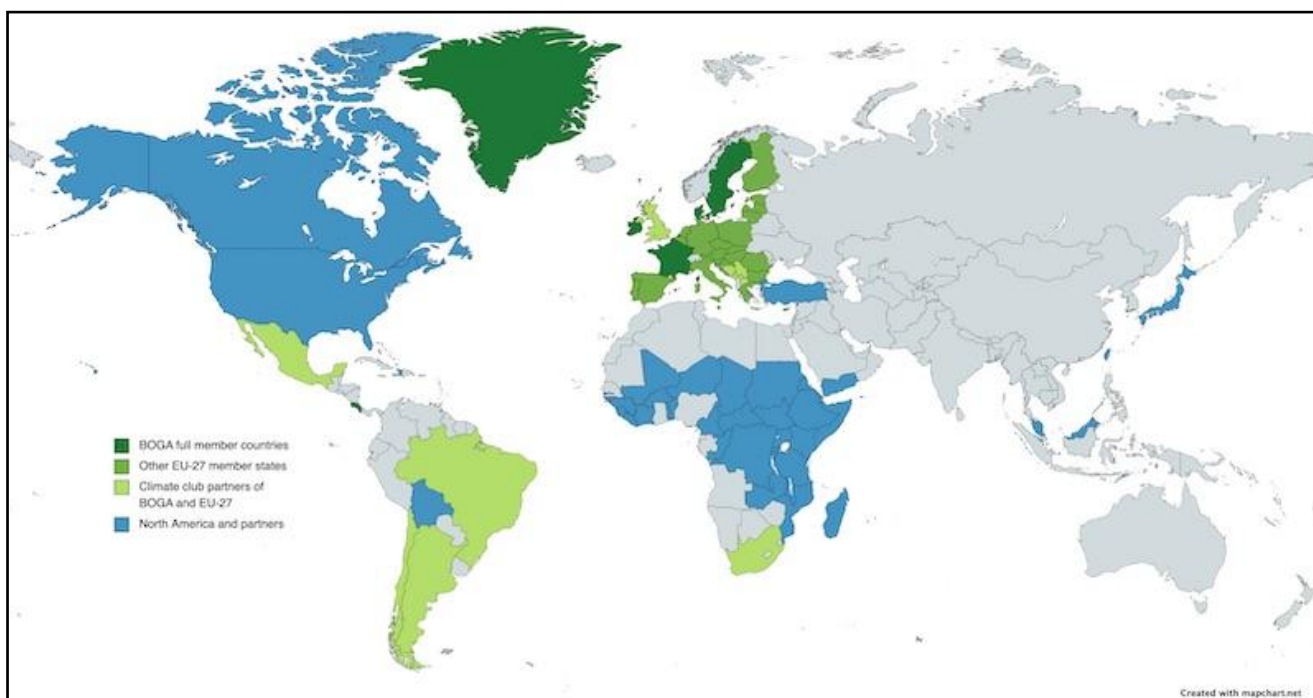
As we can see from Fig 3, all of these countries together, along with the EU-27 and other BOGA members, are home to approximately a billion of the world's people, or an eighth of the world's population.

Now let's get a little more ambitious.

Bringing in a group of 'least developed countries' (LDCs), along with the USA, Canada and some other wealthy nations

The so-called 'least developed countries' (LDCs) have extremely low emissions per capita but extremely high poverty levels. They tend to be among the hardest hit by climate disruption, and are therefore in urgent need of climate finance and other forms of meaningful support.

Fig 4: BOGA/BOGCA member countries, the EU-27, North America, and partner countries including some LDCs



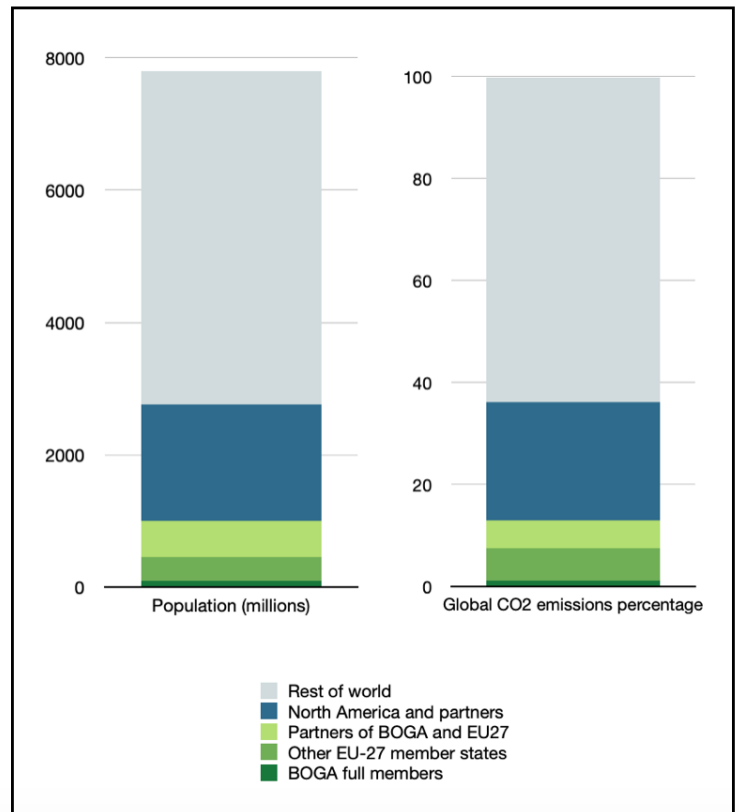
Cap and Share is an opportunity to ensure that the LDCs are systematically included in the global energy transition, with significant funding guaranteed, on a regular basis, to get to the people who really need it. It would therefore be advisable to include as many LDCs as possible in the partnership from early on.

Wealthy countries that have very high emissions per capita, such as the US and Canada, would be ideal partner countries for joining the Cap and Share club along with a group of LDCs. In order to 'catch up' with the lower-emissions Cap and Share club members and become eligible to join,

³⁰ This would make it easier to manage trade between neighbouring countries.

North America would need to pool its proceeds with that of quite a large group of people around the world, representing approximately four times its own population.

This may seem, at first, to be a serious disincentive to the North American countries when compared to a go-it-alone Cap and Share system, because in comparison to most other world regions, the income from a go-it-alone system for North America would be quite high, whereas in the Cap and Share club, the US and Canada would be contributing approximately \$503 billion per year to LDCs and the other partners. This would be roughly fifty times North America's existing annual climate finance pledge. However, it should be borne in mind that considerably larger sums are already being spent by these governments - spending on the US military alone in 2021 was *more than one and a half times greater*³¹ than this figure, at \$801 billion - and that many believe that pledged climate finance levels from high-income countries are not nearly high enough .



So the money clearly exists to finance the Cap and Share club on a global basis. The club has, moreover, considerable potential for improving geopolitical stability³² - and thereby helping to alleviate the perceived need for high military spending. A more balanced and equal world in which everyone is able to meet their basic needs is likely to be a far more peaceful one too.

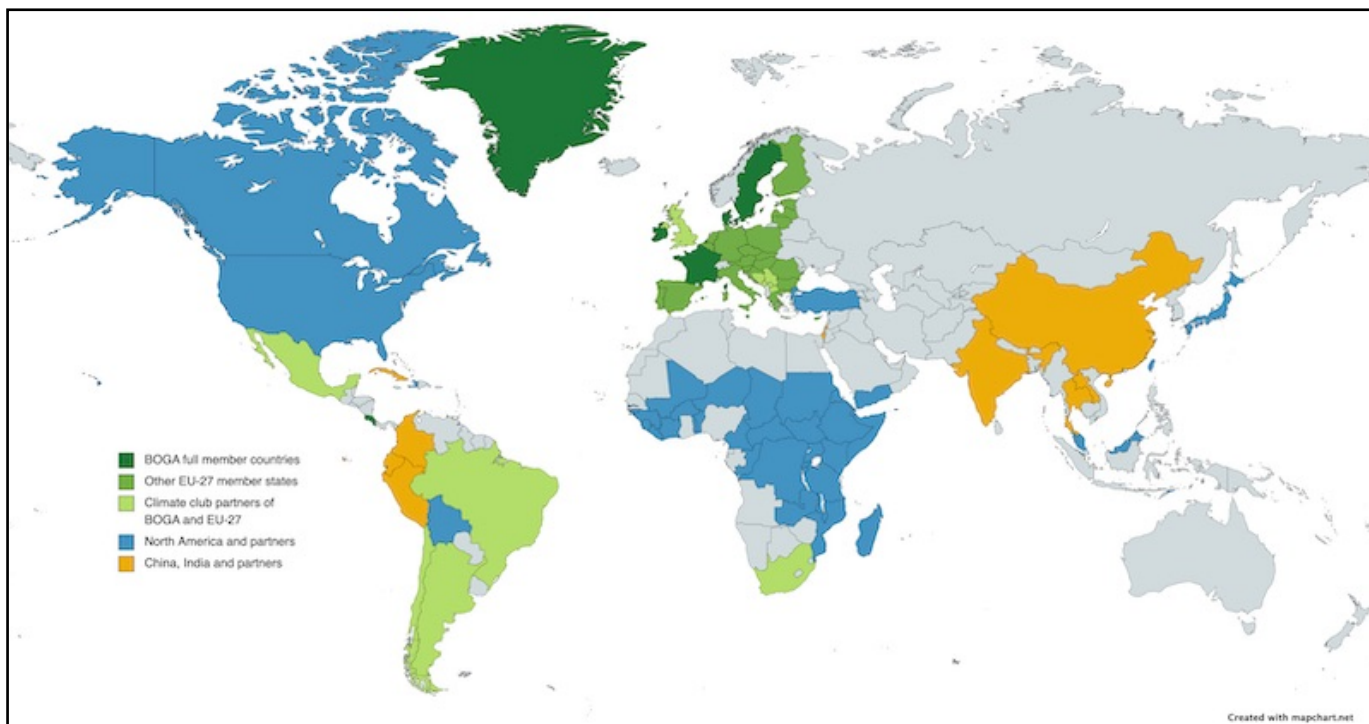
The enormous amount of experimentation and research in recent years into direct cash transfers in the Global South (with some programmes affecting tens of millions of people) should provide useful insights to help with the optimal distribution of the proceeds in those areas of the world that lack infrastructure and markets³³. First Nations or other indigenous groups which may not wish to be involved in the cash economy at all should have the option to direct their share of the proceeds elsewhere if they prefer (although in some case it may be of use in helping them to get legal support to prevent land-grabbing, or to reclaim land that they have lost.)

³¹ <https://data.worldbank.org/indicator/MS.MIL.XPND.CD?locations=US>

³² The club could improve energy security by encouraging the development of renewable energy, thereby lessening dependence on volatile fossil-fuel-producing states. In addition, by alleviating poverty and helping to stabilise the overall economy, it would lessen the ability of demagogues to take power and act aggressively.

³³ See for example <https://capglobalcarbon.org/2016/06/05/tackling-climate-poverty-and-inequality-together-managing-the-share-in-capglobalcarbon-on-a-global-level/>

Fig 7: BOGA/BOGCA member countries, the EU-27, North America, and partner countries including some LDCs, India and China

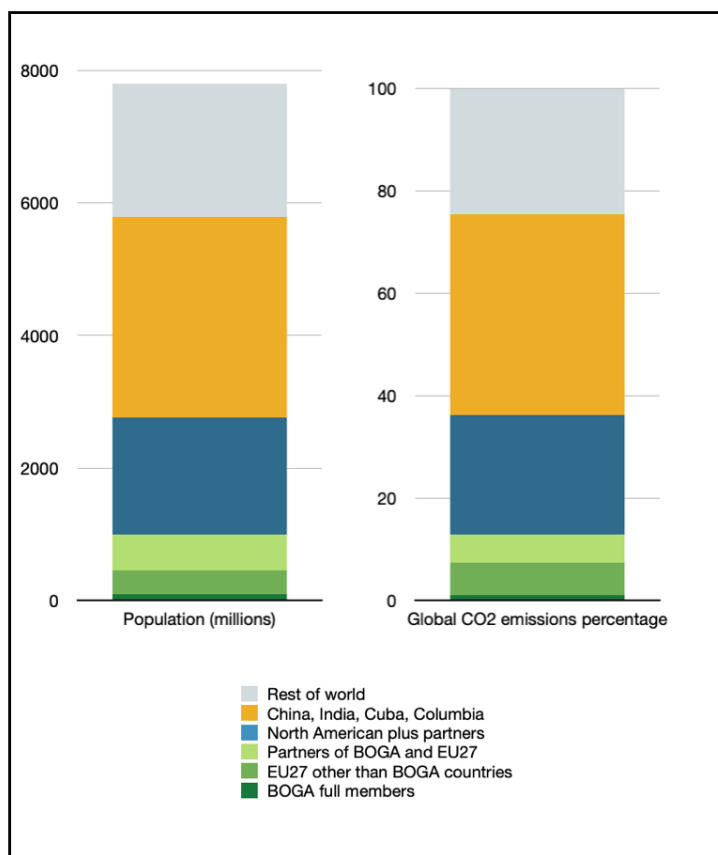


Bringing in China and India

The Cap and Share club suggestions proposed above do not include the world's two giants in terms of population. But obviously their participation in the partnership will be vital to significantly reducing emissions.

It would actually be rather straightforward to include China and India in a Cap and Share club if we consider the maths involved, as they happen to have almost 'symmetrical' emissions at present; China's per capita emissions are somewhat above the global average, and India's are below average by an almost equal amount. At the time of writing, India's population was still estimated to be 60 million lower than China's, although that will probably quickly change.

To bring the collective per-capita emissions of these countries a little closer to the global average, a number of Latin American countries could also be added to the group. The Cap and Share club would then cover approximately three quarters of the world's population and emissions.



I have excluded most of the major fossil-fuel-producing states from this proposal, on the assumption that they would be among the most reluctant to join the partnership. By no means all

of the excluded states fall into this category, however, and as mentioned above, the proposals here are only intended to serve as examples. Other groupings of countries would be possible too.

In any case, obviously the goal is actually for every country to eventually sign up to the Cap and Share club. While it may seem naïve to believe that such a thing could be possible, the fact is that the major fossil-fuel-producing states would lose a significant portion of their export markets if they failed to do so. This could be considerably more financially disruptive for them than a carefully managed phase-out of their fossil fuel production, including support for their energy transition and for other forms of trade.

Conclusion

The proposal described in this paper takes an upstream, systemic approach to climate change mitigation and places a strong emphasis on justice, on generating climate finance and on poverty alleviation.

It would establish an expanded (and renamed) Beyond Oil, Gas and Coal Alliance as forward-looking, global-minded and fundamentally ethical in its approach to climate stabilisation and adaptation. This group's new and broader mission would enable it to form a 'Cap and Share club' to reduce fossil fuel use and emissions, and also address global poverty by returning proceeds from a carbon charge back to people.

The club would have a significant impact on global carbon emissions, both through direct emissions cuts and by helping to prevent emissions rebound. It would also make a real, tangible difference to many ordinary people around the world who are currently in precarious circumstances by providing hope and the ability to plan for the future, improving geopolitical stability, and helping to reorient the overall global economy towards human and ecological wellbeing.

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