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Commentary

An international plan for sustainable development☆

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ABSTRACT

International cooperation on climate and taxation remains inadequate to deliver decarbonisation, reduce poverty, and finance sustainable development at the required scale. We propose a *Sustainable Union* among willing countries, combining carbon pricing, new taxes on wealth, polluting fuels, financial transactions, and corporate income, with international revenue-sharing and conditional cooperation mechanisms. Most revenues would remain with participating governments for domestic spending, while a defined share would be pooled internationally. Specifically, participating countries would contribute 1% of gross national income (GNI) to a common pool redistributed in proportion to population, generating net transfers from richer to poorer countries. Meanwhile, the remainder of the revenue would increase domestic fiscal space by on average 2.2% of GNI. Although politically ambitious, such a framework might be credible, as governments are already advancing related forms of voluntary cooperation, and survey evidence indicates that it would be supported by majorities worldwide.

Introduction

International negotiations on climate change and taxation have made progress, but not at the scale or speed required to address the intertwined challenges of decarbonisation, poverty reduction, inequality, and sustainable development. Existing arrangements have yet to deliver agreements ambitious enough to reduce emissions in line with the Paris temperature goals, curb tax avoidance and competition, and generate the scale of international transfers needed to support climate action

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and development in lower-income countries. Delays in coordination increase both the economic and environmental costs of transition, with the heaviest burdens falling on the poorest and most vulnerable countries. Stronger international intervention is therefore needed.

These challenges should not be treated in isolation. Sustainability and poverty are analytically distinct problems, but they increasingly reinforce one another. On the one hand, lower-income countries and vulnerable populations are more exposed to climate damages. On the other hand, they have fewer fiscal resources to invest in mitigation, adaptation, and recovery, let alone sustainable development. The funding gap to achieve the Sustainable Development Goals (SDGs) is estimated at $700 billion per year for low- and lower-middle income countries (Kharas and McArthur, 2019). At the same time, extreme wealth concentration and international tax competition weaken states' capacity to raise revenue from those most able to contribute, while high-carbon activities remain underpriced. International cooperation is required to collect new taxes on the wealthiest while preventing tax avoidance due to tax dumping. This is why we link sustainability and coordinated taxation within a common institutional framework at a global scale.

We propose an international plan for sustainable development among willing countries. We outline a Sustainable Union that combines carbon pricing, new taxes on wealth, polluting fuels, financial transactions, and corporate income, together with fair revenue-sharing and conditional cooperation mechanisms. The proposal is guided by four objectives: to achieve the Paris Agreement temperature target, to support the SDGs, to remain economically efficient, and to be acceptable to most countries and citizens. While existing proposals on climate finance, carbon pricing, and international tax justice offer important contributions (E.J. Pisani-Ferry and Zettelmeyer, 2025; Zucman, 2024; Bolton et al., 2025; Fabre, 2026; Stoft, 2009), they often address only part of this broader problem. Our aim is to provide a more integrated framework linking sustainability, redistribution, and development through a common set of principles and policy instruments.

We challenge the skeptical view that such an ambition would be politically infeasible. Countries are already advancing voluntary and plurilateral forms of cooperation on related issues, including expanded multilateral development finance, decarbonisation of international shipping, and the new UN Framework Convention on International Tax Cooperation. In addition, recent survey evidence indicates majority public support for international climate action, global redistribution, and supranational solutions to shared problems (Andre et al., 2024; Ghassim and Pauli, 2024; Fabre et al., 2025; Fabre, 2025b).

Our proposal has four elements. First, participating countries would adopt a common carbon-pricing framework, starting with a price floor and developing over time into a shared carbon market consistent with the Paris Agreement. Second, they would coordinate new taxes on wealth, polluting fuels, financial transactions, and corporate income. Third, most revenues would remain with national governments for domestic spending, while a defined share would be pooled internationally to support sustainable development and climate action. In particular, countries would contribute 1% of gross national income to a common pool redistributed in proportion to population, generating net transfers from richer to poorer countries. Fourth, the Union would rely on mechanisms of flexibility and conditional cooperation to incentivise participation.

While decisions at the UNFCCC require unanimity, a coalition of willing countries can already begin to work productively to propose ambitious agreements, with no need for universal participation, on the condition that they are fair and open to all countries.

1. International carbon pricing

In the short term, all countries participating in the Sustainable Union would establish a carbon price floor of $10 per ton of CO_2. This relatively low value roughly corresponds to the carbon price on China's national carbon market and would allow for a smooth transition. In the medium term, the Union would establish an international competitive market for carbon permits. Once the carbon market is fully in place, the Union would auction emission permits to fossil fuel companies upstream. The permit quota would be reduced each year, until it reaches zero at a predetermined date, say 2050 and at the very latest 2075. The quota would respect a global emissions target compatible with the objectives of the Paris Agreement. To leave a fair carbon budget to countries outside the Union, we suggest that the quota corresponds to the emissions target scaled by the Union's share of the world's population.

We stress that the carbon market does not have to imply a uniform carbon price, because some countries may choose to implement a higher carbon price than the international one. To avoid carbon leakage resulting from differentiated carbon prices, carbon border tax adjustments are needed. However, such adjustments should in our view be coordinated, and their implementation overseen by a multilateral institution to assess tax liabilities and arbitrate disputes impartially.

More than in the details of carbon tariffs, high stakes lie in the allocation of the carbon market's emissions rights. Indeed, unlike previous *climate club* proposals, which would have left carbon pricing revenues within each country (Nordhaus, 2015; Wolfram et al., 2025), we propose an equitable allocation of emission rights involving substantial international transfers.

As a benchmark, each country would be granted emissions rights proportional to its population. Alternative burden-sharing rules have been proposed, such as equal per capita cumulative emissions, ability to pay, grandfathering (Dekker et al., 2025), or a combination of these (Baer et al., 2008), sometimes adjusted for unequal geographical conditions or climate vulnerability (Pan and Chen, 2022; Banerjee et al., 2025). However, as Grubb (1990) puts it, the equal per capita benchmark is "the best combination of long term effectiveness, feasibility, equity, and simplicity", and it is endorsed by many economists such as Kallis et al. (2012), Blanchard and Tirole (2021), and Rajan (2021).

There would be some adjustments to the benchmark, in line with specific needs and ambition of certain regions as we show in Table 1. In particular, China and the EU would receive emissions rights corresponding to their own, ambitious decarbonisation pathway. The official emission trajectory of the EU entails lower emissions (24 $GtCO_2$) than its equal per capita share (54 $GtCO_2$); whereas the ambitious decarbonisation pathway in China would entail higher emissions (147 $GtCO_2$) than its equal per capita share (131 $GtCO_2$), see He et al. (2022). Importantly, integrating all countries' emissions within a common market guarantees that countries jointly respect the target. For example, if the EU ends up emitting more than it aimed for, this would have to be compensated by other countries (e.g., in Africa) emitting less than the world average and selling unused emissions rights to the EU. Emissions reductions should take place where they are the least costly, thus ensuring efficiency. This is the beauty of cap-and-trade systems.

2. Towards fairer international taxation

With a low carbon price, international transfers due to carbon pricing may remain limited, e.g., at 0.15% global GDP in case the carbon price equals the $10/$tCO_2$ carbon price floor. Such a situation with a non-binding quota is likely to occur in the first years when the quota stringency is gradually ramped up. Complementary transfers will be needed to achieve the SDGs, to meet the climate finance goals, and to provide sufficient financial resources to the Global South.

Given the breadth of financing needs in the short term, we suggest that international transfers should be immediately scaled up from billions to trillions U.S. dollars, so that it is worthwhile to pursue innovative sources of finance. A tax on ultra-high wealth, a financial transactions tax, a higher minimum rate for the corporate income tax,

Table 1
Carbon budget over 2030–2080 (in $GtCO_2$): Equal per capita budgets and proposed budgets.

	Africa	China	Latin America	India	Europe	Japan & South Korea	Other Asia	U.S.	*World*
Equal p.c.	144	**131**	64	140	**51**	16	118	33	*770*
Proposal	147	**147**	64	140	**24**	16	125	33	*770*

Table 2
Budget gain, international transfers and revenues collected from global taxes (% of GNI), in selected countries (see full table in Supplementary Material).

	Budget gain	International transfer		Wealth Tax (3% >100M)	Wealth Tax (2% >5M)	Fin. Trans. Tax	Carbon Tax (10$/t)	Maritime fuel tax (100$/t)	Aviation fuel tax (300$/t)	Corpor. inc. tax (min 21%)
		Total	1% GNI							
World	3.2	|0.7|	|0.5|	0.72	1.28	0.32	0.33	0.10	0.22	0.28
DRC	27.0	25.7	14.3	0.31	0.54	0.14	0.11	0.12	0.11	0.00
India	10.2	6.3	4.3	1.26	1.51	0.26	0.61	0.05	0.17	0.01
Indonesia	4.9	2.9	1.8	0.25	0.42	0.24	0.45	0.23	0.32	0.04
China	3.4	−0.1	0.1	1.06	1.51	0.10	0.58	0.05	0.15	0.12
Japan	1.1	−0.7	−0.6	0.22	0.53	0.40	0.23	0.05	0.14	0.27
USA	2.6	−1.3	−0.8	0.90	1.92	0.27	0.19	0.03	0.21	0.33

Note: The third column gives the international transfer implied by a reallocation of 1% of each country's GNI to each country in proportion to their population. The second column gives the total international transfer proposed, which adds to the former one a reallocation of half of the tax on ultra-high wealth. The vertical bars at the world international transfers indicate that the figures correspond to the transfers paid by contributing countries in proportion to the world GNI (instead of the sum of all transfers, which is zero). Budget gain denotes the sum of total international transfer and revenues collected (columns 4 to 10).

or an aviation or a maritime fuel levy are all potential candidates. Following advocacy for these taxes by scholars (e.g., at the World Inequality Lab) and civil society organisations (such as the Tax Justice Network), they are now being studied by the Global Solidarity Levies Task Force led by Barbados, France, and Kenya.

Again, we propose that a share of the revenues from new taxes be pooled at the international level and rebated to countries in need. While allocating tax revenue in proportion to countries' population helps to propel the SDGs, it does not address the needs for adaptation nor for the Losses and Damages Fund. It is therefore advisable that at least one instrument be used to finance losses and damages. The instrument could be chosen as one that only affects the wealthiest, to not burden ordinary people with a contribution that might not be returned to their country. The tax on ultra-high wealth proposed by Brazil seems fit for purpose (Zucman, 2024). A share (say half) of this tax on ultra-high wealth should finance the Loss and Damage Fund and multilateral guarantee funds (Hourcade et al., 2025).

Table 2 estimates the potential revenues from new taxes at the global level (see the Appendix for details). These would amount to over 3% of global GNI (or 3438 billion U.S. dollars per year), the majority of which would come from wealth taxes (2129 billion U.S. dollars per year). Each country is assumed to implement a global tax on ultra-high wealth (a 3% tax for those with more than $100 million in wealth) as well as a national wealth tax (a 2% tax above $5 million, so that the marginal tax rate above $100 million becomes 5%, which is still below the return to capital on large fortunes). The remaining revenues would come from carbon pricing with a higher rate on the maritime and air sectors, currently exempt from taxes (683 billion U.S. dollars per year) and from taxes on financial transactions and profits (626 billion U.S. dollars per year). A tax on the super-profits of fossil fuel companies could also be added, as well as a tax on digital advertising as has been suggested by Acemoglu and Johnson (2024).

Our plan proposes that one percent of each country's GNI is reallocated to all participating countries in proportion to their population. Part of these international transfers would already be covered by the allocation of carbon pricing revenues. Indeed, the deviation of a country's use of emission permits from its allowance would count as an international transfer. In addition, to approximate the extra transfers needed for loss and damage compensation, half of the tax on ultra-high wealth is assumed to finance (through the funds) countries with per capita GNI below twice the world average, in proportion to their distance to this threshold.

We stress the necessity of an *equitable* climate outcome and acknowledge the responsibility of developed countries, whose current income level stems from a historical accumulation of capital since the beginning of the Industrial Revolution and that has benefited from their past emissions. Meanwhile, it is time to move beyond the simple dichotomy between developing and developed countries because, compared to say thirty years ago, some countries are no longer developing countries. For example, Slovenia, South Korea, Saudi Arabia, and Singapore are still classified as developing countries by the UNFCCC, although they are richer than Greece, which is classified as a developed country. We prefer simple yet continuous, harmonised, transparent, and up-to-date measures of development, such as GNI per capita, as the basis for countries' contributions. These are already used as the basis for a range of international arrangements from eligibility to International Development Association loans to allocation of Special Drawing Rights. Making the pooled amount proportional to the country's GNI ensures that transfers take place from rich to poor countries. The bigger the extent by which GNI per capita of a particular country exceeds the world average, the more this country contributes. Countries with a GNI per capita below the world average benefit from the pooling and rebating of carbon price revenues.

Figs. 1 and 2 estimate for each country the revenue collected from the proposed new taxes as well as the proposed transfers between countries in the case of universal participation (see also Table A.3 in the Appendix). These mechanisms would entail $768 billion per year in North-to-South transfers (see Fig. 1), which are mostly borne by the richest 1%. This figure rises up to $1 trillion per year if one adds existing Official Development Assistance. These transfers are similar in magnitude to the SDG funding gap and to the poverty gap at $4 per day expected in 2030. Therefore, this transfer should be sufficient to eradicate extreme poverty (defined with the $3 per day threshold). As an illustration, a country like the D.R.C. would receive 26% of its GNI in transfers, and India would receive 6% (see Table 2).

One third of the revenues collected in high-income countries would finance their net international contribution. This corresponds to the preferred share of a global wealth tax that the average American or Western European would wish to allocate to low-income countries (Fabre et al., 2025). Global redistributive taxes are likely to enjoy broad popular support, because 69% of Americans and 84% of Europeans stated their support for a global tax on all millionaires to fund transfers to low-income countries, according to a recent survey (Fabre et al., 2025). Support for an internationally redistributive tax on millionaires is strong even if the policy were implemented in

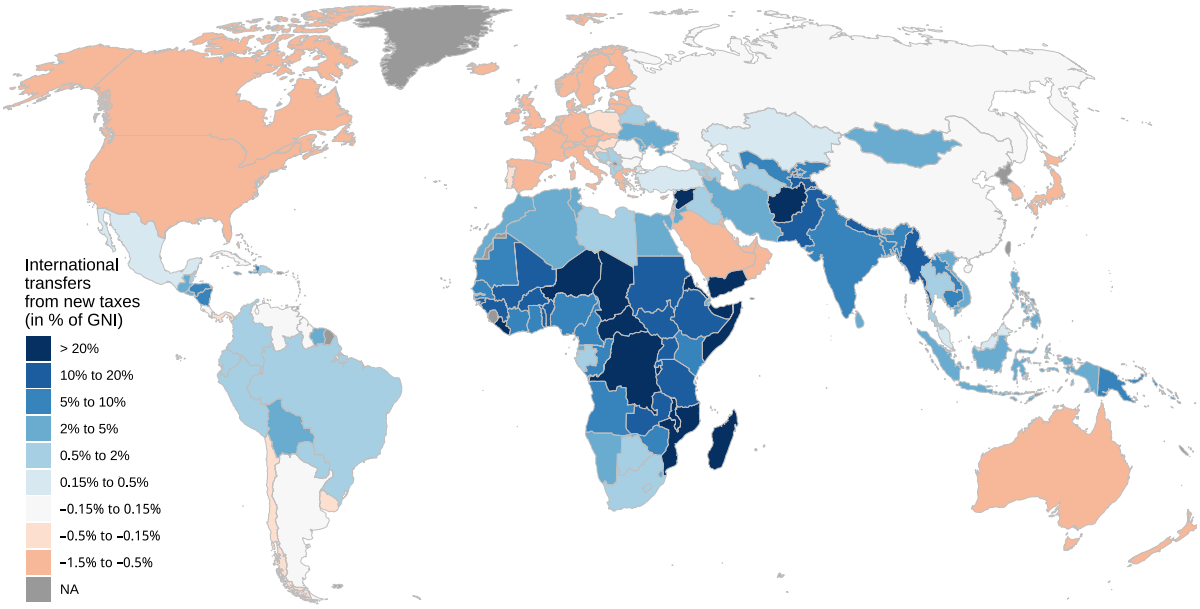

Fig. 1. International transfers to be financed by new global taxes. *The instruments proposed entail North-South transfers of $768 billion per year.*

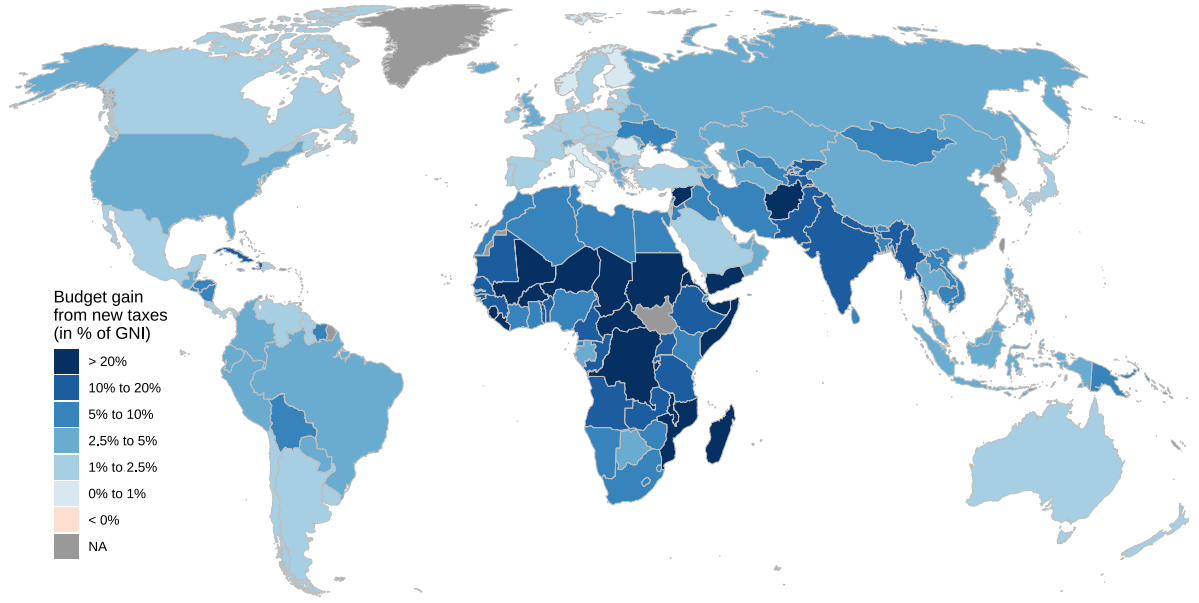

Fig. 2. Net gain for state budgets from new taxes and international transfers (revenue plus net transfer). *The governments of all countries gain.*

just a few countries, with majority support in the eleven high-income countries surveyed by Fabre (2025b), namely the U.S., Japan, Russia, Saudi Arabia, and seven European countries.

3. Proposal for an international treaty

The group of countries forming what we call the Sustainable Union and signing up to the international treaty would have to agree on the following elements: (i) a target for revenues from new levies on the richest and on pollution, say at least 2% of their GNI; (ii) a common contribution to sustainable development, that we propose at 1% of GNI; and (iii) a global carbon budget, say 850 $GtCO_2$ starting in 2025.[1] The parties to the Sustainable Union would be expected to apply minimum rates of taxation on CO_2 emissions, individual wealth, and financial transactions, and to create a global asset registry to list the assets held by each person.

Tax avoidance would be prevented thanks to the extraterritorial mechanism of the "tax collector of last resort" proposed by Zucman (2024). The Union would collect the "missing" tax due to the non-application by countries inside or outside the Union of the minimum tax rates on multinational profits and individual wealth. In this case,

[1] This carbon budget covers non-LULUCF CO_2 emissions (see Forster et al. (2025) for carbon budgets including LULUCF CO_2). It is based on the scenario SSP226MESGB published by Gütschow et al. (2021), which maintains global warming below 1.8 °C in the 21st century. The scenario entails 867 $GtCO_2$ emissions during 2025–2100, including 67 Gt of negative emissions during 2080–2100. Emissions from the LULUCF sector and from other gases are not specified, but they will have to be negative over the period.

the Union would demand payment of the "missing" tax, pro rata to the activities of the company (or companies controlled by the wealthy individual) that take place inside the Union, on pain of retaliatory measures against the company or individual in question. These revenues would be used to increase transfers from the Union to the countries of the Global South.

To respect the plurality of solutions and the sovereignty of States, the treaty would leave the choice of programs to be financed to the beneficiary States themselves, provided they are validated by a multilateral agency. The agency in question would ensure that funds are traceable, and that they finance only public services, social protection and sustainable infrastructure. In the event of non-compliance with conditionalities, management of the funds would be entrusted to (another) multilateral agency, which would ensure that the population of the beneficiary country benefits. This mechanism would guarantee that transfers contribute to the intended uses and that they are not diverted or misused. To boost compliance with the treaty, in addition to the *tax collector of last resort* mechanism, countries which fail to enforce the carbon price could be excluded from the Union. To encourage participation, the Union could also vote to restrict non-participating countries' access to their market, for example by imposing tariffs beyond the carbon border adjustment.

4. A pragmatic union for the greatest number

The Union would be open to all countries. To encourage as many countries as possible to join, it could include elements of flexibility and conditional cooperation. In particular, the participation required of a high-income country could be reduced to the extent that other high-income countries did not participate. Thus, if the European countries join the Union but the United States and Japan do not, Europe's contribution could be halved. Also, to facilitate the accession to the Union, a country could make its participation in carbon pricing conditional on an exemption from the system of taxes and transfers (it would then be subject to the same carbon price as the others but would receive the revenues corresponding to its emission rights instead of the net transfer corresponding to its GNI), provided this is accepted by the majority of other countries (weighted by their population). Finally, a country could make its participation conditional on the participation of one or more other countries, or on the GNI or emissions covered by the Union exceeding a threshold. For example, the European Union could choose to participate on condition that 60% of global emissions are covered, which would de facto make its participation conditional on that of China (which accounts for 30% of global emissions).

Various countries in the Global South could spearhead the Sustainable Union. The African Union has already taken similar positions (African Union, 2023). At COP30, Brazil launched an Open Coalition on Compliance Carbon Markets, which was already joined by 18 members, including the EU and China. Mexico is presided over by a lead author of the fifth IPCC report. India would have a strong interest to join such a Union, since it would receive large transfers from the rest of the world. China, with a per capita income equal to the world average, would be neither a contributor nor a beneficiary. It would have an interest in participating to ensure a low-carbon future in the long term, and outlets for its low-carbon equipment exports in the short term.

We do not expect high-income fossil fuel exporters such as the United States, Russia, or Saudi Arabia to participate in the Union in the short term (though Democratic U.S. States such as California or New York could join it). Nonetheless, a Union composed of the Global South, China, the European Union, and some other high-income countries such as Japan, South Korea, the United Kingdom, and Canada would already cover 72% of global CO_2 emissions. If such a Union respects an emissions pathway compatible with global warming of 1.8 °C in 2100 relative to preindustrial temperatures, and assuming that non-participating countries follow a business-as-usual scenario without additional climate policies, global warming would reach 2.0 °C in 2100, that is 0.6 °C less than if the whole world follows the business-as-usual scenario (Fabre, 2025a).

5. Societal support for the sustainable union

Many people might believe that a treaty for a Sustainable Union is politically impossible, especially in high-income countries. Yet recent academic surveys reveal strong public support for international climate policies, supranational governance, and North-to-South solidarity. A survey of 125 countries shows that 69% of people are willing to contribute 1% of their income to fight climate change (Andre et al., 2024). Another survey in 17 countries (which include China, India, Russia, France, and Egypt) reveals that around 70% of the population supports a global democratic government to deal with global issues (Ghassim and Pauli, 2024). Representative surveys from 20 countries show very strong support for climate and redistributive policies that are implemented at the global level, even as costs are made salient (Fabre et al., 2025).

These surveys show strong majority support for a global carbon price, as well as near-consensus among the public in favour of allocating its revenue equally per capita. They also show that a global tax on millionaires to fund low-income countries is supported by 8 out of 10 people in high-income countries. Further surveys in eleven high-income countries suggest that parties advocating global redistribution could win votes in elections, and confirm that an international climate scheme akin to our proposal receives majority support in each country, even if implemented by a small coalition of countries (Fabre, 2025b). This study also shows that a majority in these countries would accept a global income redistribution of 5% of world GDP to address global poverty. Fabre (2025b) also reconciles votes for nationalist parties with widespread acceptance for sustainable development policies, by showing that other issues dominate public concerns.

Admittedly, despite public support, the prospect of global cooperation on sustainable development and climate action is dim in the short term, due to other political constraints, including hostile governments in major countries like the United States. However, the direction of world politics could well shift in a few years, and a coalition of the willing could make progress despite the opposition of major countries, particularly on the preparatory work required for such an ambitious proposal.

While we recognise that current conditions are not conducive of China's participation in the proposed Sustainable Union, this assessment may soon change. In particular, once China's emissions have peaked and the policy focus shifts from managing emissions intensity to achieving economy-wide absolute reductions, the proposed framework could become increasingly attractive for China. Under China's latest NDC framework, emissions are projected to decline by approximately 7%–10% by 2035 relative to peak levels. This marks a structural transition from intensity-based control towards absolute mitigation. In this phase, carbon pricing becomes a more effective and economically efficient policy instrument, because it facilitates cross-sectoral abatement, supports structural adjustment, and helps to limit rebound effects. Against this backdrop, participation in a coordinated international carbon-pricing and revenue-recycling framework would be broadly consistent with China's post-2030 mitigation needs. Importantly, such engagement could enable China to contribute more actively to global climate governance while avoiding a disproportionate financial burden.

As far as India is concerned, the emissions intensity of GDP has to be reduced by 45% by 2030 compared to the 2005 level, according to the COP26 NDC. Most of the decarbonisation promises are in terms of carbon intensities, not absolute caps. However, we note that India has promised to achieve the net zero target by 2070. According to the Indian government's estimates, meeting its climate pledge will require $170 billion annually by 2030, of which $40 billion is already funded domestically (Chakravarty et al., 2024). Participation in the Sustainable Union would provide India with the required funding. We are therefore relatively optimistic that India can also partake in a Sustainable Union.

The Trump US administration has taken drastic steps which are at odds with our proposal. However, several U.S. states including

California have shown leadership and commitment to climate goals and to supporting developing countries with transfers. Notwithstanding the political swings we have witnessed at the national level, it could thus be envisaged that U.S. states could individually join a Sustainable Union. Most notably, California — with a GDP which would make it rank as the 4th largest country globally — has put in place a carbon pricing scheme which is central to its climate strategy. The scheme utilises a Cap-and-Invest program (formerly Cap-and-Trade) to reduce greenhouse gas emissions by 40% below 1990 levels by 2030 and reach carbon neutrality by 2045. The program covers 85% of emissions, uses auction revenues to fund climate projects, and ensures a rising price floor to incentivise clean technology. There is thus room for optimism for a Sustainable Union to take roots in large parts of the United States despite the radical moves by the Trump administration, which do not reflect the consensus.

6. A solution based on climate justice

Since the start of the climate negotiations in 1992, the countries of the Global South have been demanding a financial contribution from the countries of the Global North, in recognition of their overwhelming responsibility for climate change, and to finance their sustainable development. Our proposal for a Sustainable Union would attend to this legitimate demand and operationalise the principle of Common But Differentiated Responsibilities and Respective Capabilities. It would do so by setting a benchmark for contributions and transfers, thus resolving the long-standing issue of how to share the burden of climate mitigation. Our proposal is that financial contributions are proportional to GNI, while financial transfers and emission rights are proportional to the size of the population in each country. In this way, countries with per capita incomes below the global average benefit financially (see Fig. 1). Countries with per capita incomes above the world average will be net contributors, but the new taxes will be paid by the richest individuals, generating additional resources for their governments. Such a treaty for a Sustainable Unions should garner wide support, since the population of each country benefits from a more stable climate, increased public revenues, and sustainable development.

While previous attempts of international carbon pricing have failed, this time may be different for four reasons. First, we now know from surveys that the public at large supports a global carbon price. Second, survey evidence also indicates that the world population accepts a common norm on how to share the revenues from a global carbon price, namely it should be shared out in equal per capita allocation. Third, new coordinated taxes on the wealthiest would provide fiscal space and increase support for the whole package. Indeed, surveys document strong public support for taxes on the wealthiest that would partly finance sustainable development in low-income countries. Fourth, rather than seeking universal agreement among all countries, a Sustainable Union can be formed by a broad set of ambitious countries (a coalition of the willing) and then make it attractive for other countries to join at a later stage.

Although they still need to be amended and negotiated, we believe that the principles and instruments that we put forward can pave the way for fruitful international agreements. Public attitudes suggest that high-level political impetus, prepared by extensive legal and diplomatic work, could make this vision for sustainable development a reality. We hope that our proposals can contribute to a positive political tipping point where a much larger and growing group of nations work together to solve humanity's great challenges.

Concerted international actions are crucial to ensure a sustainable and more just world economy with reduced poverty.

CRediT authorship contribution statement

Adrien Fabre: Writing – review & editing, Writing – original draft, Visualization, Software, Methodology, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Rabah Arezki:** Writing – review & editing. **Dipak Dasgupta:** Writing – review & editing. **Bin Hu:** Writing – review & editing. **Partha Sen:** Writing – review & editing. **Frederick van der Ploeg:** Writing – review & editing.

Declaration of competing interest

We have no conflict of interest to declare.

Appendix

We estimate the revenues by country from six global taxes: a progressive wealth tax, a small carbon tax, a higher minimum corporate income tax, a financial transaction tax, a tax on maritime fuel, and a levy on aviation fuel (Table A.3). $3.4 trillion would be collected.

We further estimate international transfers that could be financed. We reallocate 1% of each country's GNI to all countries in proportion to their population, and one half of the wealth tax to countries with a per capita GNI lower than twice the world average, in proportion to their distance to this threshold. The combination of these taxes and transfers entails $768 billion in North–South transfers.

A.1. Wealth tax

We consider and simulate two wealth taxes. First, a global tax on individuals with ultra-high wealth (the so-called Zucman-tax): a 3% tax on all individual wealth in excess of $100 million. Second, a national wealth tax: a 2% tax on wealth in excess of $5 million. These taxes add up,[2] so that the highest marginal tax rate is 5%.

The World Inequality Lab offers an online simulator to estimate the revenue collected by a custom wealth tax in each world region. Building on this work, we disaggregate the revenue estimates at the country level. Courtesy of Félix Bajard, we obtained the simulator's underlying data for 50 countries covering 95% of global wealth tax revenue. To impute missing data, we predict the taxable base from a linear regression of the log of taxable base on the log of nominal GDP per capita, weighted by country population.

Following Zucman (2024), we assume that tax evasion amounts to 20%. We also conservatively assume that asset prices would decline by 10%. Half of the revenue from the global tax on ultra-high wealth would not be retained domestically but channelled into a fund to finance sustainable development. This fund would return revenues to countries with a per capita GNI below a threshold. We fix this eligibility threshold at twice the world average per capita GNI, or $26,951 per year (in nominal terms). Finally, eligible countries receive a transfer per person that is proportional to the difference between the threshold and their GNI per capita.

A.2. Financial transactions tax

Pekanov and Schratzenstaller (2019) estimate the revenues from a Financial Transactions Tax (FTT). Following the proposal by the European Commission (2011), they use a rate of 0.1% of bonds and stocks and a rate of 0.01% on derivatives. We use their baseline scenario, which assumes evasion rates of 15% on bonds and stocks and 70% on derivatives, together with an elasticity of trading volumes of −1.[3]

[2] For example, with a wealth of $150 million, someone would pay each year a tax of 2.9% on their wealth: 1% from the tax on ultra-high wealth ($3\% \cdot (150 - 100) = 1.5M$) and 1.9% from the national wealth tax.

[3] The formula is: Revenue = tax rate · volume · evasion · $(1 + \text{tax rate}/\text{transaction cost})^{\text{elasticity}}$.

Table A.3
Global taxes: budget gain, international transfers, revenues collected (% of GNI).

	Budget gain	International transfer		Wealth Tax (3% >100M)	Wealth Tax (2% >5M)	Fin. Trans. Tax	Carbon Tax (10$/t)	Maritime fuel tax (100$/t)	Aviation fuel tax (300$/t)	Corpor. inc. tax (min 21%)
		Full	1% GNI							
World	3.2	|0.7|	|0.5|	0.72	1.28	0.32	0.33	0.10	0.22	0.28
Afghanistan	47.7	45.1	26.0	0.29	0.49	0.55	0.83	0.00	0.40	0.00
DRC	27.0	25.7	14.3	0.31	0.54	0.14	0.11	0.12	0.11	0.00
Sudan	21.4	19.1	11.1	0.33	0.57	0.45	0.53	0.06	0.36	0.00
Uganda	18.1	16.5	9.3	0.34	0.58	0.20	0.15	0.01	0.33	0.00
Myanmar	17.7	15.6	10.0	0.36	0.61	0.50	0.35	0.04	0.24	0.00
Ethiopia	16.7	15.0	8.8	0.35	0.60	0.14	0.13	0.00	0.45	0.00
Tanzania	14.7	13.0	7.4	0.35	0.61	0.22	0.20	0.02	0.26	0.00
Pakistan	12.8	11.6	6.8	0.02	0.05	0.36	0.50	0.04	0.19	0.00
Nigeria	9.9	8.1	4.5	0.10	0.63	0.25	0.35	0.36	0.10	0.00
Kenya	9.2	7.4	4.3	0.39	0.67	0.15	0.18	0.02	0.42	0.00
India	10.2	6.3	4.3	1.26	1.51	0.26	0.61	0.05	0.17	0.01
Bangladesh	6.4	5.9	3.6	0.03	0.06	0.13	0.17	0.02	0.08	0.00
Morocco	6.5	4.0	2.5	0.44	0.74	0.22	0.48	0.18	0.46	0.00
Vietnam	5.7	3.9	2.4	0.01	0.57	0.17	0.51	0.11	0.42	0.00
Egypt	5.7	3.6	2.2	0.44	0.48	0.29	0.64	0.07	0.21	0.00
Philippines	4.8	3.2	1.9	0.27	0.48	0.19	0.22	0.03	0.37	0.00
Ukraine	6.1	3.1	2.1	0.46	0.78	0.21	1.00	0.31	0.20	0.00
Iran	6.9	3.1	2.0	0.45	0.77	0.37	1.64	0.39	0.22	0.00
Indonesia	4.9	2.9	1.8	0.25	0.42	0.24	0.45	0.23	0.32	0.04
Algeria	5.1	2.5	1.6	0.46	0.78	0.26	0.72	0.18	0.14	0.00
Iraq	5.8	1.8	1.0	0.47	0.80	0.33	0.99	1.33	0.08	0.00
South Africa	5.9	1.7	1.0	0.34	0.66	0.20	1.17	0.55	0.39	0.87
Colombia	4.1	1.6	1.1	0.49	0.83	0.21	0.24	0.37	0.30	0.00
Thailand	4.8	1.6	1.1	0.49	0.84	0.25	0.61	0.20	0.78	0.00
Brazil	3.6	0.8	0.5	0.59	0.76	0.17	0.28	0.55	0.23	0.23
Turkey	2.0	0.5	0.2	0.13	0.23	0.24	0.45	0.10	0.37	0.00
Mexico	2.3	0.2	0.1	0.59	0.74	0.17	0.30	0.05	0.22	0.03
Argentina	2.5	0.1	0.1	0.55	0.93	0.14	0.34	0.18	0.22	0.01
China	3.4	−0.1	0.1	1.06	1.51	0.10	0.58	0.05	0.15	0.12
Russia	3.1	−0.1	0.0	0.87	1.06	0.18	0.79	0.16	0.24	0.00
Poland	1.4	−0.2	−0.2	0.11	0.19	0.16	0.44	0.07	0.10	0.58
Saudi Arabia	1.2	−0.6	−0.6	0.10	0.36	0.13	0.53	0.46	0.22	0.00
Spain	1.1	−0.6	−0.5	0.24	0.39	0.21	0.14	0.06	0.36	0.34
South Korea	1.3	−0.7	−0.6	0.31	0.53	0.11	0.30	0.16	0.20	0.38
Japan	1.1	−0.7	−0.6	0.22	0.53	0.40	0.23	0.05	0.14	0.27
Italy	0.8	−0.8	−0.6	0.35	0.50	0.17	0.13	0.04	0.16	0.23
UK	3.2	−0.8	−0.7	0.25	0.43	2.36	0.12	0.04	0.28	0.55
Germany	1.5	−1.0	−0.7	0.49	0.99	0.22	0.16	0.06	0.15	0.44
Canada	2.4	−1.0	−0.7	0.59	1.25	0.09	0.27	0.08	0.26	0.92
France	2.3	−1.1	−0.7	0.80	1.57	0.33	0.10	0.02	0.20	0.40
USA	2.6	−1.3	−0.8	0.90	1.92	0.27	0.19	0.03	0.21	0.33

Note: The third column gives the international transfer implied by a reallocation of 1% of each country's GNI to each country in proportion to their population. The second column gives the total international transfer proposed, which adds to the former one a reallocation of half of the tax on ultra-high wealth. The vertical bars at the world international transfers indicate that the figures correspond to the transfers paid by contributing countries in proportion to the world GNI (instead of the sum of all transfers, which is zero). Budget gain denotes the sum of total international transfer and revenues collected (columns 4 to 10).

Pekanov and Schratzenstaller (2019) provide estimates at the global level and for 18 high-income countries. We allocate the global revenue that does not originate from these 18 countries to remaining countries, in proportion to their GDP. 22% of world revenues would be collected in these remaining countries, with a revenue amounting to 0.1% of their GDP (vs. 0.56% of GDP for the 18 high-income countries).

A.3. Carbon price

We simulate the international transfers from the revenues of a $10/t$CO_2$ carbon price floor applied to all non-LULUCF CO_2 emissions at the global level. We neglect behavioural responses since they would be limited with such a low price floor, and estimate that 0.33% of the world nominal GDP would be collected. This estimate is only valid in the first years if the carbon price floor is binding. In the medium term, carbon pricing revenue will grow substantially, to 1%–2% of the world GDP.

A.4. Maritime fuel levy

We simulate the revenues of a $100/t$CO_2$ levy on maritime fuel. The emissions from shipping by country are given by the simple average between the minimum and maximum estimates of Dequiedt et al. (2024), who graciously provided the data.

A.5. Aviation fuel levy

Using data from Graver et al. (2018),[4] we estimate the revenues from a tax on all flights (domestic and international). Due to complex climate effects such as contrails, aviation the global warming potential of aviation (GWP^*_{100}) is 3 times the warming caused by its CO_2 emissions (Lee et al., 2021). To fully account for all effects on global warming, the carbon levy on aviation should be multiplied by that factor. Therefore, we simulate a $300/t$CO_2$ tax on aviation fuel, comparable to the $100/t$CO_2$ tax on maritime fuel. We use the 2018 data without adjusting for the expected increase in air traffic and without adjusting for the decrease in traffic that would follow the tax,

[4] We use the data unadjusted for tourism.

Table A.4
Comparison of population vs. adult pop. entitlement; carbon balance (% of GNI).

	Int'l transfers (population)	Int'l transfers (adult)	Budget gain (population)	Budget gain (adult)	Annualised carbon balance 1850–2024	Annualised carbon balance 1990–2024
Afghanistan	45.1	41.1	47.7	43.7	250.9	157.4
DRC	25.7	22.8	27.0	24.1	146.1	99.8
Sudan	19.1	17.7	21.4	20.0	108.3	73.4
Uganda	16.5	14.8	18.1	16.4	87.9	62.0
Myanmar	15.6	15.9	17.7	18.0	128.1	68.7
Ethiopia	15.0	14.0	16.7	15.7	89.5	59.1
Tanzania	13.0	11.8	14.7	13.4	74.5	51.6
Pakistan	11.6	11.1	12.8	12.2	62.5	40.3
Nigeria	8.1	7.3	9.9	9.1	48.7	30.9
Kenya	7.4	6.9	9.2	8.7	42.3	30.1
India	6.3	6.4	10.2	10.3	43.3	22.7
Bangladesh	5.9	6.0	6.4	6.5	44.2	26.0
Morocco	4.0	4.1	6.5	6.6	29.5	15.0
Vietnam	3.9	4.1	5.7	5.8	28.0	14.2
Egypt	3.6	3.5	5.7	5.6	19.4	10.2
Philippines	3.2	3.2	4.8	4.7	22.1	13.9
Ukraine	3.1	3.3	6.1	6.3	−48.6	−14.2
Iran	3.1	3.2	6.9	7.0	−6.0	−9.7
Indonesia	2.9	3.0	4.9	5.0	20.2	10.0
Algeria	2.5	2.5	5.1	5.1	10.4	3.9
Iraq	1.8	1.7	5.8	5.7	2.5	0.1
South Africa	1.7	1.7	5.9	5.9	−18.1	−10.7
Colombia	1.6	1.7	4.1	4.2	13.4	7.8
Thailand	1.6	1.8	4.8	4.9	10.0	1.9
Brazil	0.8	0.8	3.6	3.6	9.1	4.6
Turkey	0.5	0.5	2.0	2.0	3.6	0.3
Mexico	0.2	0.2	2.3	2.3	1.2	0.5
Argentina	0.1	0.1	2.5	2.5	1.9	0.3
China	−0.1	−0.1	3.4	3.5	3.8	−1.3
Russia	−0.1	−0.1	3.1	3.2	−22.9	−11.5
Poland	−0.2	−0.2	1.4	1.5	−13.6	−5.2
Saudi Arabia	−0.6	−0.6	1.2	1.2	−5.5	−5.1
Spain	−0.6	−0.6	1.1	1.1	−0.5	−1.2
South Korea	−0.7	−0.7	1.3	1.3	−2.5	−3.7
Japan	−0.7	−0.7	1.1	1.1	−3.8	−3.1
Italy	−0.8	−0.8	0.8	0.8	−1.3	−1.5
United Kingdom	−0.8	−0.8	3.2	3.2	−10.6	−1.6
Germany	−1.0	−1.0	1.5	1.5	−9.4	−2.6
Canada	−1.0	−1.0	2.4	2.4	−7.9	−4.3
France	−1.1	−1.1	2.3	2.3	−3.5	−0.7
United States	−1.3	−1.3	2.6	2.6	−9.1	−3.5

Note: Budget gain denotes the country net entitlements, i.e. the revenue it collects plus the net international transfer. International transfers denotes the country net entitlements minus taxes paid in the country. The carbon balance is separated from the tax proposals, it corresponds to the carbon credit or debt over 1850–2024 (or 1990–2024), priced at \$185/tCO$_2$ and annualised at 3.5%. For example, a country with excess emissions compared to the world average accumulates a carbon debt.

using the approximation that the two effects would roughly balance out.[5]

A.6. Higher minimum corporate income tax

We estimate extra revenue by country if the internationally agreed minimum rate on corporate income tax was raised from 15% to 21%, with no carve-out. We use data from the tax deficit simulator from the EU Tax Observatory. These estimates are available for 45 countries (from OECD and the G20). We impute missing data only for three high-income countries (Iceland, Israel, New Zealand) and conservatively assume no extra revenue for other (developing) countries with missing data.

A.7. Carbon balance

On top of the proposed new taxes, we compute historical responsibilities for climate change. Indeed, as we wrote in the main text, if political feasibility were less of a constraint, it would be preferable to adopt a more progressive burden-sharing rule that takes into account historical responsibilities. We define a carbon balance as the sum of a country's excess emissions compared to the world average, each year between 1850 and 2024, priced at $p = \$185/\text{tCO}_2$ (which corresponds to the social cost of carbon according to Rennert et al., 2022). In Table A.4, we report the carbon balance annualised at a risk-adjusted discount rate of $r = 3.5\%$. Denoting e_t^c the emissions of country c in year t, and π_t^c its share of the world population at t, its annualised carbon balance over nominal GNI, B_c, is: $B_c = r \cdot p \cdot \sum_{t=1850}^{2024} e_t^c - \pi_t^c \cdot \sum_c e_t^c / \text{GNI}_c^{2023}$. Our computations are based on historical CO_2 emissions excluding LULUCF sector (Gütschow et al., 2021).

Data availability

Our figures are fully reproducible from our data and code, openly availably on

Replication of An International Plan for Sustainable Development (Reference data) (github)

[5] More generally, we do not adjust for inflation or changes in volumes throughout this technical note. Figures are only provided to get ballpark estimates and cannot be very precise.

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