Why Taxing Emissions is a Must for Climate and Development at Macron's Summit - Annex

This annex gives an overview of proposals for international carbon taxes with estimates of revenue raised, notes on feasibility and links to proposals and relevant evidence.

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| Aviation levy | A levy applied at point of ticket, varying in rate either according to the total emissions of the flight or incorporating other factors (such as the distance of the flight, the cost of the ticket against emissions, and the individual's frequency in flying). [An OHCHR report](#) suggests a rate of between US$10 – US$25 per person per flight. [Another OHCHR report](#) proposes a rate of US$10 – US$75 per economy/business class ticket. | US$10bn – US$150bn per year, depending on scope of adoption and levy amounts. | International aviation emissions are currently largely unregulated. If international aviation were a country, it would be the [8th largest emitter](#) (2018 data). An existing levy has already been enacted in nine countries to fund the UNITAID drug-purchasing facility, providing a concessional and predictable funding flow. This measure [did not attract criticism](#), and in fact was subsequently adopted by other countries. A levy for climate purposes, especially if it is [designed in a non-regressive way](#), may be still better supported. Levies focused on wealthy frequent flyers [may be most politically feasible](#). The industry is currently resistant: the International Air Transport Association [has committed](#) to Net Zero by 2050, but has [spoken out](#) against taxes. An air travel levy was proposed at COP14 by the LDC group, but | [Boyd, 2019](#)  
[Boyd and Keene, 2021](#)  
[Chapman et al., 2021](#)  
[Neiva et al., 2021](#) |
| Maritime shipping levy | A levy applied on all shipping globally, at the point of bunker, to be reassessed at fixed intervals (eg. every 5 years), and likely to be enforced by the International Maritime Organisation. The price per tonne varies between US$75, rising to US$150 per tonne by 2040; and US$250–300 per tonne (proposed, interestingly, by Trafigura). | Projections vary, between US$92bn and US$150bn according to rates per tonne. (The Trafigura proposal may generate around $200bn, but this is not fully set out). | Maritime shipping is currently untaxed and is governed by the International Maritime Organisation (IMO). Governments were split on feasibility in 2020. This may be changing: in 2022 intersessional meetings, a consensus was found that the IMO should put a price on carbon as part of a basket of mid-term measures supporting longer-term shipping decarbonisation. This will be discussed in July 2023, for implementation from 2025. Industry actors also notably support decarbonisation and GHG taxes: Maersk and Trafigura have both proposed high levies. | Trafigura, 2020  
Adamopoulos, 2021  
Boyd and Keene, 2021  
Marshall Islands and Solomon Islands, 2021 (proposal to UNFCCC)  
Parry et al., 2018  
Boyd and Keene, 2021  
Maersk, 2021 |
| Financial transactions tax (FTT) | A micro-fee charged against each financial transaction, typically either of an asset or within a jurisdiction. This would have the benefit of being primarily levied from the rich, who are more likely to undertake the high-volume rapid transactions targeted. In the United States, for example, an FTT of 0.00051% funds the Federal Securities and Exchange Commission. | US$7bn – US$60bn, per the 2012 Advisory Group. Wemaëre et al. (2023) report that an EU-wide FTT is estimated to have a possible yield of around US$80bn per year; and a US domestic FTT at 0.1% could generate an average of around US$78bn per year. An unrelated 2010 IMF assessment suggested An FTT doesn’t have any useful incentives for climate; but advocates argue it is easy to operationalise, and is already in use for domestic revenue raising in numerous states. However, cross-border FT Ts have proven more difficult: EU negotiations on an intra-bloc FTT have been ongoing since 2013, and discussions in different bodies of an international FTT after the 2008 financial crisis all foundered. Moreover, the tax is not generally proposed to target emissions directly (although it could be), and would be likely to increase market inefficiencies. An international FTT may thus have limited political feasibility (as was observed by the 2012 Advisory Group). | Secretary-General’s High-Level Advisory Group on Climate Change Financing, 2012  
Spratt and Ashford, 2011  
WWF, 2010 |
A global FTT of 0.1% could raise over US$200bn annually.

| Fossil fuel extraction levy | A levy charged on extractors of coal, oil, and gas, based on carbon emissions likely to be emitted when used. The proposers give a rate of US$5 per tonne of CO2, increasing by US$5 per tonne annually until 2030 and then US$10 per tonne until 2050. | US$210bn in its first year, rising to an average of US$300bn per year by 2050 (assuming significant reduction in demand). | It is widely accepted that the “polluter pays” principle must be at the centre of an equitable approach to climate finance. Fossil fuel companies are the archetypal polluters and have historically made large profits from this “global public bad.” No international tax on fossil fuel extraction has yet been attempted. A precedent has been set by the International Oil Pollution Compensation Funds, however, which charge fossil fuel companies for damages caused by spilt oil. Some developing and climate-vulnerable states with high extraction rates, such as Timor-Leste or Trinidad and Tobago, may need to be reassured that they will retain the revenues of local extraction or that they will benefit from the loss and damage fund the tax supports, if they are to agree to the new tax. | Richards et al., 2023  
Richards et al., 2018 |

| Extractive industry solidarity micro-levy | A levy to be charged against extractors of oil or other polluting materials, at a fixed rate of, for example, US$0.10 per barrel. | US$1.64bn per year | Micro-levies have previously been used to fund health and climate change adaptation activities. They may serve to generate new, additional revenue streams; provide stable and longterm funding; link wealth generated through globalisation with global public goods; offset “global public bads” by diverting funds to a global public good; and provide a “painless” revenue source. | Cited in UNFCCC, 2023 |
| Windfall tax | Contingent on circumstances | There is no example of an international windfall tax, but several regional windfall taxes have been implemented within the EU. A windfall tax would however need to be supplemented by other, more consistent, mechanisms. By its nature it would be unpredictable; only provide short-term funding; require close international coordination; and risk creating cross-border spillover effects, especially if there were defectors. | Richards et al., 2023 | Wemaère et al., 2023 |

A tax levied during unusual economic conditions against those gaining an unexpectedly large profit in a way felt to be excessive or unjust. A windfall tax would cover a limited number of subjects and be applied retroactively to the period of unusual profit. The UN Secretary-General called in late 2022 for a windfall tax to be levied against energy companies increasing their profits following the invasion of Ukraine by Russia.