Ensuring No Net Incidence on Developing Countries from Carbon Pricing of International Transport (The Rebate Mechanism)

Outline and RM keys; Durban CC Talks 2011

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'No net incidence' for a breakthrough in Durban

The key to break the deadlock in the complex area of emission reductions and innovative financing from international transport is the concept of "no net incidence". Recommended in the AGF Report and introduced into International Maritime Organization (IMO) negotiations, the requirement to "ensure no net incidence on developing countries" from carbon pricing of international transport is already being supported by various major countries, including China and Australia (informally). It will reconcile the different principles of shipping and climate change conventions enabling progress in Durban.

Rebate Mechanism to ensure not net incidence

Already formally proposed and assessed in the IMO, the Rebate Mechanism (RM) is a way to ensure no net incidence on developing countries from carbon pricing of international maritime transport. The RM was designed to apply to any revenue-generating market-based mechanism for shipping (maritime MBM) – be it a levy or an ETS. It can also apply to aviation. Through the RM developing countries can be rebated the potential cost or incidence of a maritime MBM.

RM details

The mechanism calculates the rebate using the global MBM costs and a trade-based key, countryby-country. Each developing country receives the attributed rebate, unless it decides to forego it. The developing country that foregoes its rebate, or part of it, would be internationally recognized for such action, and the foregone rebates could potentially contribute to South-South collaboration. Developed countries are not entitled to rebates but are automatically credited for the amount of financing raised through the MBM, based on the same attribution key. Consequently, the net revenue raised, after rebates have been issued, would come from customers in developed countries only, thereby complying with the principles and provisions of the UNFCCC, while simultaneously securing a global approach to shipping emissions.

The rebate key could be adjusted each year, accordingly with changes in trade patterns. The optimal rebate keys for 150+ developing countries and attribution keys for developed countries are enclosed overleaf, based on 2007 trade by sea and air.

Long-term financing contribution

Around one third of the total revenue would be redistributed to developing countries through the Rebate Mechanism. The remaining USD 10+ billion annually would be new and additional financing to support mitigation and adaptation actions in the most vulnerable countries. By 2030, since the shipping sector's emissions will most likely increase even if regulated, the mechanism would generate in the region of USD 35 billion each year for climate change. As an example, the European Union would automatically be credited for circa 28% of this amount based on the optimal attribution keys (see overleaf).

RM's optimal rebate & attribution keys¹ for:

(1)	Rebates	for	developing	countries ²	(with	SIDS details)
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Country/region	R Key %	Country/region	R Key %	Country/region	R Key 🤊
Afghanistan	0.0238	Gambia	0.0030	Nigeria	0.331
Albania	0.0346	Georgia	0.0360	Niue	0.000
Algeria	0.2820	Ghana	0.0727	Oman	0.117
Angola	0.0893	Grenada	0.0038	Pakistan	0.274
Antigua and Barbuda	0.0075	Guatemala	0.1182	Palau	0.001
Argentina	0.3586	Guinea	0.0126	Panama	0.065
Armenia	0.0282	Guinea-Bissau	0.0010	Papua New Guinea	0.027
Azerbaijan	0.0404	Guyana	0.0101	Paraguay	0.034
Bahamas	0.0320	Haiti	0.0156	Peru	0.167
Bahrain	0.1130	Honduras	0.0577	Philippines	0.598
Bangladesh	0.1565	India	1.9806	Qatar	0.212
Barbados	0.0134	Indonesia	0.6912	Rwanda	0.005
Belize	0.0059	Iran (Islamic Rep. of)	0.4176	Saint Kitts and Nevis	0.002
Benin	0.0103	Iraq	0.1952	Saint Lucia	0.006
Bhutan	0.0049	Israel	0.5823	Saint Vincent and the Grenad	0.003
Bolivia	0.0177	Jamaica	0.0695	Samoa	0.002
Bosnia and Herzegovina	0.0724	Iordan	0 1048	San Marino	0.000
Botswana	0.0370	Kazakhstan	0.1729	Sao Tome and Principe	0.000
Brazil	1 1268	Kenva	0.0907	Saudi Arabia	0.885
Brunei Darussalam	0.0195	Kiribati	0.0007	Senegal	0.050
Burkina Faso	0.0158	Korea, Dem. People's Rep. o		Serbia	0.159
Burundi	0.0042	Korea, Rep. of	3.6796	Seychelles	0.008
Cambodia	0.0492	Kuwait	0.2070	Sierra Leone	0.004
Cameroon	0.0350	Kyrgyzstan	0.0168	Singapore	2.358
Cape Verde	0.0076	Lao People's Democratic Rep		Solomon Islands	0.002
Central African Republic	0.0070	Lebanon	0.1197	Somalia	0.002
Chad	0.0240	Lesotho	0.0179	South Africa	0.807
Chile	0.3783	Liberia	0.00173	Sri Lanka	0.117
China	8.3490	Libvan Arab Jamahiriya	0.0627	Sudan	0.097
China, Hong Kong SAR	2.0579	Macedonia (the former Yugo		Suriname	0.009
China, Macao SAR	0.0322	Madagascar	0.0421	Swaziland	0.003
Taiwan Province of China	2.2651	Malawi	0.0232	Svrian Arab Republic	0.139
Colombia	0.2847	Malavsia	1.1751	Taiikistan	0.022
Comoros	0.2847	Maldives	0.0113	Tanzania, United Rep. of	0.022
Congo	0.0012	Mali	0.0113	Thailand	1.344
Congo Congo (Democratic Rep. of th		Malta	0.0147	Timor-Leste	0.004
Cook Islands Costa Rica	0.0011	Marshall Islands Mauritania	0.0007	Togo	0.007
	0.2200			Tonga	
Côte d'Ivoire	0.0682	Mauritius Mexico	0.0402	Trinidad and Tobago Tunisia	0.079
Cuba	0.1123		1.4594		0.187
Cyprus	0.0902	Micronesia (Federated State		Turkmenistan	0.021
Djibouti	0.0044	Moldova, Rep. of	0.0263	Tuvalu	0.000
Dominica	0.0020	Mongolia	0.0075	Uganda	0.030
Dominican Republic	0.1415	Montenegro	0.0298	United Arab Emirates	1.268
Ecuador	0.1196	Morocco	0.3182	Uruguay	0.035
Egypt	0.2499	Mozambique	0.0210	Uzbekistan	0.045
El Salvador	0.0790	Myanmar	0.0304	Vanuatu	0.002
Equatorial Guinea	0.0288	Namibia	0.0089	Venezuela (Bolivarian Rep. o	0.362
Eritrea	0.0066	Nauru	0.0008	Viet Nam	0.511
Ethiopia	0.0592	Nepal	0.0274	Yemen	0.082
Fiji	0.0184	Nicaragua	0.0325	Zambia	0.038
Gabon	0.0204	Niger	0.0090	Zimbabwe	0.013

Example: Ethiopia's annual rebate would be \$6 million for total carbon costs of \$10bn (i.e. 0.06% of \$10bn)

Small Island Developing State	R Key, %
Singapore	2.36
Dominican Republic	0.14
Cuba	0.11
Trinidad and Tobago	0.08
Jamaica	0.07
Mauritius	0.04
Papua New Guinea	0.03
Fiji	0.02
Haiti	0.02
Barbados	0.01
Remaining SIDS	0.33
TOTAL SIDS	3.21
TOTAL non-Annex I	40.19

(2) Crediting developed countries for climate financing raised

Country	Attr Key %	Country	Attr Key %
alia	1.5983	Latvia	0.0958
ia	0.4521	Lithuania	0.1143
us	0.0910	Luxembourg	0.0506
um	1.6705	Netherlands	2.3298
iria	0.2399	New Zealand	0.3177
da	1.9773	Norway	0.4904
ia	0.2318	Poland	0.7256
n Republic	0.4328	Portugal	0.5020
nark	0.3991	Romania	0.5534
ia	0.1123	Russian Federation	1.3992
nd	0.6018	Slovakia	0.3236
e	2.6018	Slovenia	0.0961
iany	4.6015	Spain	3.0122
ce	0.7362	Sweden	0.9112
ary	0.4480	Switzerland	0.5129
nd	0.0690	Turkey	1.6386
nd	0.5932	Ukraine	0.5624
	2.9651	United Kingdom	3.9644
1	6.4161	United States of America	15.9771
I	6.4161	United States of America	

Example: EU would be credited for raising \$2.85 billion of climate financing when total revenue from carbon pricing of shipping emissions is \$10bn (i.e. 28.5% of \$10bn)

Developed Country/region	Attr Key %
European Union*	28.53
United States of America	15.98
Japan	6.42
Canada	1.98
Turkey	1.64
Australia	1.60
Russian Federation	1.40
Remaining 7 countries	2.28
TOTAL Annex-I Parties	59.81

¹Each key reflects a percentage of total costs or revenue from carbon pricing of shipping emissions. ²Developing country may forego the rebate or a part of it, and be recognized for such action. Thus the rebates may amount to 30% or less. The keys are for 2007 (the full Study is available at: www.imers.org/docs/optimal_rebate_key.pdf).