Securing additional climate financing by

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

Outline and RM keys; August 2011

Dr Andre Stochniol, andre@imers.org, +44 7809 764 894

'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, country-by-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 keys[1] for:

(1) **Rebates** for developing countries[2]

Country/region	Rebate Key %	Country/region	Rebate Key %	Country/region	Rebate Key %
Afghanistan	0.0238	Gambia	0.0030	Nigeria	0.3313
Albania	0.0346	Georgia	0.0360	Niue	0.0001
Algeria	0.2821	Ghana	0.0728	Oman	0.1176
Angola	0.0893	Grenada	0.0038	Pakistan	0.2748
Antigua and Barbuda	0.0075	Guatemala	0.1182	Palau	0.0018
Argentina	0.3587	Guinea	0.0126	Panama	0.0655
Armenia	0.0283	Guinea-Bissau	0.0010	Papua New Guinea	0.0273
Azerbaijan	0.0404	Guyana	0.0101	Paraguay	0.0340
Bahamas	0.0320	Haiti	0.0156	Peru	0.1677
Bahrain	0.1131	Honduras	0.0577	Philippines	0.5982
Bangladesh	0.1566	India	1.9813	Qatar	0.2130
Barbados	0.0134	Indonesia	0.6914	Rwanda	0.0056
Belize	0.0059	Iran (Islamic Rep. of)	0.4178	Saint Kitts and Nevis	0.0028
Benin	0.0103	Iraq	0.1953	Saint Lucia	0.0063
Bhutan	0.0049	Israel	0.5825	Saint Vincent and the Grenadines	0.0034
Bolivia	0.0177	Jamaica	0.0696	Samoa	0.0027
Bosnia and Herzegovina	0.0724	Jordan	0.1048	San Marino	0.0000
Botswana	0.0370	Kazakhstan	0.1729	Sao Tome and Principe	0.0008
Brazil	1.1272	Kenya	0.0908	Saudi Arabia	0.8854
Brunei Darussalam	0.0195	Kiribati	0.0007	Senegal	0.0502
Burkina Faso	0.0158	Korea, Dem. People's Rep. of	0.0153	Serbia	0.1594
Burundi	0.0042	Korea, Rep. of	3.6809	Seychelles	0.0089
Cambodia	0.0492	Kuwait	0.2071	Sierra Leone	0.0041
Cameroon	0.0351	Kyrgyzstan	0.0168	Singapore	2.3593
Cape Verde	0.0076	Lao People's Democratic Republic	0.0099	Solomon Islands	0.0029
Central African Republic	0.0021	Lebanon	0.1197	Somalia	0.0045
Chad	0.0240	Lesotho	0.0179	South Africa	0.8080
Chile	0.3784	Liberia	0.0047	Sri Lanka	0.1174
China	8.3519	Libyan Arab Jamahiriya	0.0627	Sudan	0.0970
China, Hong Kong SAR	2.0586	Macedonia (the former Yugoslav Rep	0.0421	Suriname	0.0097
China, Macao SAR	0.0322	Madagascar	0.0252	Swaziland	0.0118
Taiwan Province of China	2.2658	Malawi	0.0113	Syrian Arab Republic	0.1397
Colombia	0.2848	Malaysia	1.1755	Tajikistan	0.0228
Comoros	0.0012	Maldives	0.0113	Tanzania, United Rep. of	0.0595
Congo	0.0277	Mali	0.0147	Thailand	1.3444
Congo (Democratic Rep. of the)	0.0274	Malta	0.0510	Timor-Leste	0.0043
Cook Islands	0.0011	Marshall Islands	0.0007	Togo	0.0077
Costa Rica	0.1284	Mauritania	0.0133	Tonga	0.0015
Côte d'Ivoire	0.0682	Mauritius	0.0402	Trinidad and Tobago	0.0790
Cuba	0.1123	Mexico	1.4599	Tunisia	0.1873
Cyprus	0.0902	Micronesia (Federated States of)	0.0004	Turkmenistan	0.0213
Djibouti	0.0044	Moldova, Rep. of	0.0263	Tuvalu	0.0002
Dominica	0.0020	Mongolia	0.0075	Uganda	0.0308
Dominican Republic	0.1415	Montenegro	0.0298	United Arab Emirates	1.2688
Ecuador	0.1196	Morocco	0.3183	Uruguay	0.0354
Egypt	0.2500	Mozambique	0.0210	Uzbekistan	0.0450
El Salvador	0.0790	Myanmar	0.0304	Vanuatu	0.0021
Equatorial Guinea	0.0288	Namibia	0.0089	Venezuela (Bolivarian Rep. of)	0.3621
Eritrea	0.0066	Nauru	0.0008	Viet Nam	0.5120
Ethiopia	0.0593	Nepal	0.0274	Yemen	0.0827
Fiji	0.0184	Nicaragua	0.0325	Zambia	0.0388
Gabon	0.0204	Niger	0.0090	Zimbabwe	0.0130

SAR = Special Administrative Region

Developing Country/region	Rebate Key, %
China	8.35
Korea, Republic of	3.68
Singapore	2.36
Taiwan Province of China	2.27
Hong Kong SAR, China	2.06
India	1.98
Next 30	15.31
Remaining 120+ countries	4.10
TOTAL non-Annex I	**40.11**

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

(2) Crediting developed countries for climate financing raised

Country	Attribution Key %	Country	Attribution Key %
Australia	1.5989	Latvia	0.0959
Austria	0.4522	Lithuania	0.1143
Belarus	0.0911	Luxembourg	0.0506
Belgium	1.6711	Netherlands	2.3306
Bulgaria	0.2400	New Zealand	0.3178
Canada	1.9780	Norway	0.4906
Croatia	0.2318	Poland	0.7258
Czech Republic	0.4329	Portugal	0.5022
Denmark	0.3992	Romania	0.5536
Estonia	0.1123	Russian Federation	1.3997
Finland	0.6020	Slovakia	0.3238
France	2.6027	Slovenia	0.0961
Germany	4.6031	Spain	3.0132
Greece	0.7365	Sweden	0.9115
Hungary	0.4481	Switzerland	0.5131
Iceland	0.0690	Turkey	1.6392
Ireland	0.5934	Ukraine	0.5626
Italy	2.9662	United Kingdom	3.9658
Japan	6.4183	United States of America	15.9825

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	Attribution Key %
European Union*	28.54
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	2.33
TOTAL Annex-I Parties	**59.89**

[1] Each key reflects a percentage of total costs or revenue from carbon pricing of shipping emissions.

[2] Developing 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).

For further details please contact: Dr Andre Stochniol, andre@imers.org, +44 7809 764 894