SWITZERLAND

Ad hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA)

August 2008

Funding Scheme for Bali Action Plan

A Swiss Proposal for global solidarity in financing adaptation

Switzerland would like to submit a proposal on a funding scheme for the Bali Action Plan, in particular for financing adaptation. Switzerland would like that this proposal be part of the discussion on the approaches for financing the implementation of the Bali Action Plan, in particular adaptation. Furthermore, Switzerland would like to make use of existing institutions – such as the Adaptation Fund of the Kyoto Protocol and the Global Environment Facility – for the management of the funding of the Bali Action Plan in order to avoid a proliferation of the institutions in this field. We remain open to the dialogue with the other Parties on their proposals.

Situation

Scientific evidence confirms that climate change will continue even if mitigation policies are successfully implemented as proposed by IPCC.[1] Therefore, adaptation measures must complement mitigation, if damages are to be kept from growing to truly catastrophic levels, especially in vulnerable countries of the developing world. According to UNFCCC and World Bank estimates, the global financing needs to adapt to climate change will lie between USD 10 and 40 bn. per year. Neither the adaptation fund under the CDM of the Kyoto Protocol nor other pledged funds can provide financing of such orders of magnitude. Thus, the issue of financing the necessary measures remains unresolved.

This is why the Swiss Delegation at the twelfth Conference of the Parties of the UNFCCC in Nairobi in 2006 and later at the Bali conference in December 2007 proposed a global carbon levy to cope with the adaptation financing chasm that became more and more apparent at the time. The proposed establishment of a funding scheme shall be based on the principle of common but differentiated responsibilities and on the polluter pays principle, with a low levy on CO_2 emissions, to cope with these financing bottlenecks. The proposal presented here develops this idea further and illustrates possible designs of a revenue and disbursement model. The proposal is herewith submitted to the AWG-LCA for international discussion and further development. Such a discussion shall also serve in the coordination with similar and complementary proposals made by other countries such as Japan, Mexico, Norway, etc.

Objectives and principles

The overall goal is to strengthen the capability of the Parties to UNFCCC to address the challenges of financing climate change policy programmes and measures – especially for adaptation in vulnerable developing countries.

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1 50% reduction of year 1990/2000 global greenhouse gas (GHG) emissions by 2050

In pursuit of this goal, a global burden sharing system, based on the principle of common but differentiated responsibilities, and legally binding to all nations, is established for overcoming barriers for financing implementation of effective climate policy measures in particular for adaptation to a warming climate. The revenue for this proposal is to be raised according to the polluter pays principle through a *uniform* global levy on carbon of 2 USD/t CO_2 on all fossil fuel emissions. This leads to a burden of about 0.5 US cents/litre of liquid fuel.

The funding scheme proposes a basic tax exemption of 1.5tCO_2-eq per inhabitant, to take into account the principle of common but differentiated responsibilities. This free emission allowance relieves the low-emission countries while countries with higher-emission levels make a higher contribution to the fund. Further, countries with high levels of per capita incomes contribute a larger share of the revenues of the CO_2 levy to the funding scheme than countries with lower incomes. Through these design parameters, the free emission level and the differentiated shares of payments to and revenues from the fund, the proposed funding scheme leads to a considerable net transfer of resources from rich to poor countries.

The funding scheme also reflects the polluter pays principle as all countries assume a fair share of their responsibilities for addressing climate change issues in accordance with their share of responsibility for the problem of climate. A global and uniform CO_2 based levy reflects the need to address the climate change problem on a global scale.

The economic rationale for this initiative is as follows: Following the Stern Report on the Economics of Climate Change (2006), we have to acknowledge that climate change "*is the greatest market failure the world has seen."* From an economic point of view the best theoretical solution to correct for this market failure would be to introduce an optimal carbon price[2] in order to set adequate incentives to decarbonise the economy in the long run. Today we apply a variety of strategies and efforts to implement a carbon price (tax or trading system) in different regions and a number of countries. Nevertheless, on a global scale we are far away from an optimal carbon price. Therefore this proposal targets at a second best solution: The CO_2 based levy is designed as a low level financing tax. The revenues are assigned to finance the provision of a public good, i.e. efficient pro-active mitigation and adaptation activities. Climate change related social cost shall be reduced.

Furthermore, the architecture of the revenue and disbursement models shall be designed considering the different shares of responsibility between industrialised and developing countries for the problem of climate change and in terms of different economic capacities to contribute to the solution.

Overview of proposal

The proposed funding scheme is designed to support the Bali Action Plan, including financing, governance and allocation of revenues (Figure S-1). The revenues are to be raised through a uniform global levy on CO_2. Of the total revenue collection 18.4 bn USD shall be allocated to a multilateral regime. The share of revenues which are deposited to the multilateral regime depends on the economic situation of the countries. The share of contribution from the industrialized countries to this fund is 76%. The payments from the multilateral regime are used for financing of adaptation policies and measures. The proposal

2 Through a carbon tax or a carbon emissions trading system.

is complementary to other funding proposals made under the AWG-LCA such as the Mexican Proposal..

OVERVIEW OF SCHEME COVERING THE ENTIRE BAP PIPELINE OF ACTION

Figure S-1: BAP = Bali Action Plan.

The revenues generated under this proposal in each country are partly channeled into a National Climate Change Fund (NCCF) for financing national climate change policies according to the country's specific needs and legal frame covering adaptation, technology transfer or mitigation measures.

A share of revenues differentiated according to groups of countries formed on the basis of the per capita GDP shall flow into a global Multilateral Adaptation Fund (MAF). The MAF part of the funding is to be spent on two different themes ('Pillars'), namely[3]:

› *(i) Prevention Pillar*: Climate change impact (risk) reduction through appropriate policies and measures.
› *(ii) Insurance Pillar*: Climate impact response: relief, rehabilitation, recovery.

Industrialised countries deliver a significantly larger fraction of their tax revenues to the MAF than developing countries. In contrast, developing countries keep the largest share for their national policies and deliver only a small fraction to the MAF. Medium income countries (GDP USD 15-20'000/Cap) take an intermediate position. Figure S-2 shows the financial flows and shares contributed to the MAF and the NCCFs, respectively. The proposed parameters are illustrations for the purpose of discussion only.

[3] In the context of this proposal the terms 'preventive adaptation' and 'curative adaptation' are used. But for reasons of terminological non-proliferation and comparability with the disaster management language, the following terms may be used: 'adaptation' or 'impact reduction' for the former, and 'impact response' for the latter.

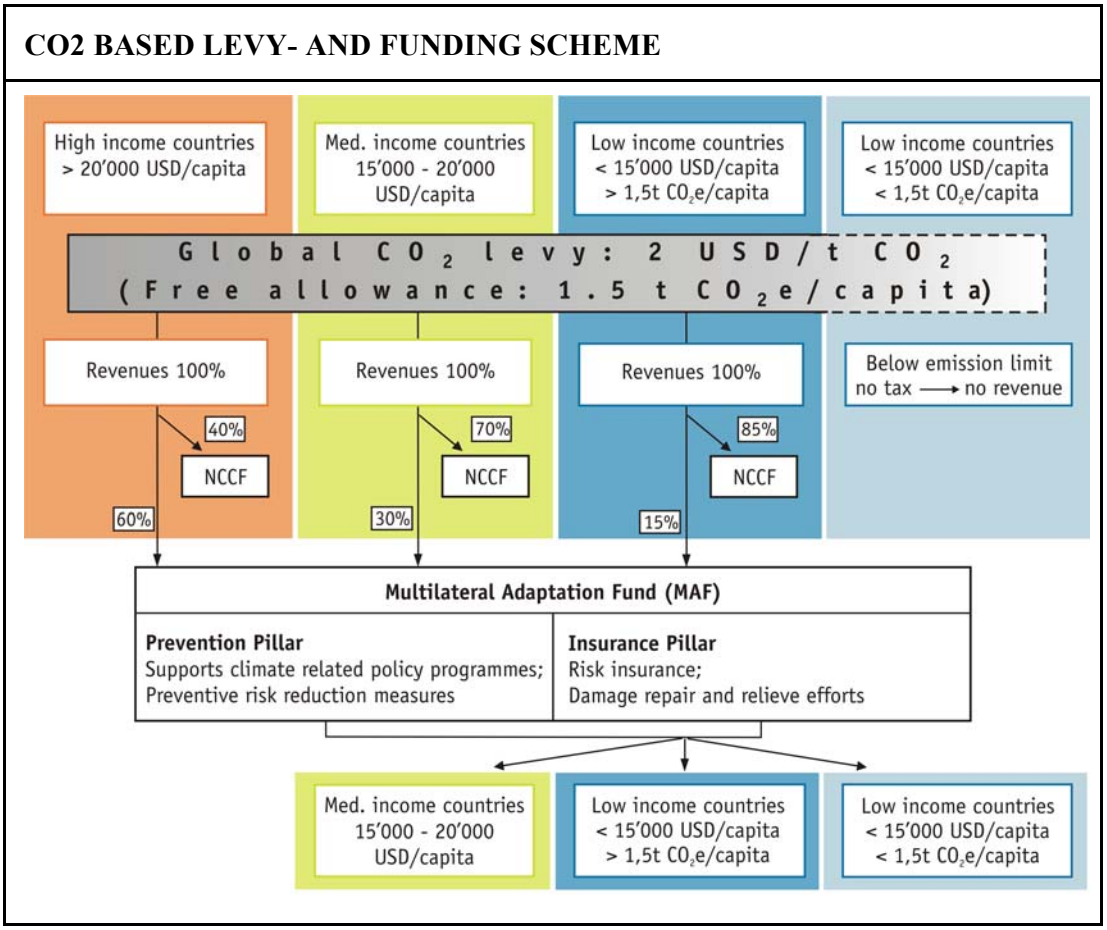

Figure S-2: This figure illustrates the leading idea of a CO_2 based levy- and funding scheme. Based on GHG emission projections and data from UNFCCC National Communications, the total revenues for funding the global MAF amount to USD 18.4 bn, of which USD 15.2 bn come from high income countries, and USD 3.2 bn come from medium/low income countries. These resources are proposed to be engaged in financing the implementation of adaptation policies and programmes in vulnerable medium and low income countries. High income countries feed their National Climate Change Funds (NCCF) with 12.2 bn USD/a, and medium and low income countries theirs with 17.8 bn USD/a. Total revenues worldwide amount to 48.5 bn USD/a (based on data of 2010).

National Climate Change Funds

Each country which decides to participate in the scheme shall autonomously operate its own NCCF. These national funds shall also operate as partner institutions to the Multilateral Adaptation Fund (MAF) and are encouraged to address the priorities of national climate change programmes and to closely coordinate with other national climate policy financing facilities depending on the national circumstances such as vulnerability to climate change and economic development. These NCCFs are seen as complementary vehicles to the project based disbursement through implementing agencies as they are operating under the GEF or under the funds established under the Marrakesh Accord. NCCF funds can be used according to national priorities for adaptation as well as for mitigation measures such as improving the energy- and climate efficiency of buildings, cars, electrical equipment, or power plants and promotion of renewable energy.

Possible examples for existing national climate change funds or guidelines for designing such funds are the China CDM Fund and the Green Investment Schemes (GIS) developed between Russia and potential AAU buyers, respectively.

Multilateral Adaptation Fund (MAF)
The Multilateral Adaptation Fund is to assist low and medium income countries in financing their adaptation policies. It is proposed to become part of the financial architecture developed under the Bali Action Plan. While by far the largest contributions come from industrialized countries, adaptation policies/programmes and measures in vulnerable developing and medium income countries are funded only. This reflects the special overall responsibility of the ICs for the climate change problem.

The World Bank and UNFCCC estimate the financial needs for adaptation in non-industrialised countries at 10 and 40 bn USD/year in 2030, while the financial flow under the Marrakech Accord merely provides some 0.1–0.2 bn USD/a. This illustrates the urgent need for further funding.

The MAF releases its funds of some 18.4 bn USD/a within a legally clearly defined governance framework. It shall be able to operate efficiently and complementarily to other similar facilities such as the GEF trust fund, the funds established under the Marrakech Accord, the World Bank's Climate Investment Funds or development assistance operating basically on a project by project basis.

Prevention Pillar
The MAF shall co-finance climate proof policies relevant from a climate change adaptation perspective including disaster risk reduction measures. The disbursement model operates in the form of contributions to the programme – rather than funding individual projects. It is assumed that the operations of the MAF will create the capacities and institutions for the implementation of this disbursement model. This enhances efficiency in line with the OECD Paris declaration on aid effectiveness. The supported policies can include risk responsive planning and design of settlements, infrastructures and of land use.

Insurance Pillar
This pillar aims at investing financial resources into safeguarding public goods, which in particular comprises to insure climate related risks, which are not covered by private insurance companies because premiums are not affordable for local insurance takers (low probability, high consequences risks). The focus is on vulnerable institutions, enterprises and segments of population in medium and low income countries. Insuring the rehabilitation of core infrastructure of an affected area, or compensation of lost assets of the most vulnerable groups shall have priority. Furthermore, the Insurance Pillar will develop pilot projects for weather risk insurances (e.g. for agriculture) at sub-regional levels. Also, a small amount of the budget can be used for developing the data basis required for such schemes (technical assistance).

An optimal form of private public partnership with the insurance sector must be developed, while guaranteeing the interests of affected groups in vulnerable developing countries. One possibility to be evaluated is assistance to the countries in the form of payment of special insurance premiums. This would correspond to the principles of subsidiarity and efficiency, and allow for a lean and efficient administration of the MAF.

Impacts and Implementation

Table S-1 shows an overview of the impacts in terms of financial flows between regions. The last column of table S-1 illustrates the total receipts from both the NCCF and the MAF in the different regions. The transfer of finances from industrialised to developing countries is shown in the second-to-last column, showing the positive net payments from the MAF for developing countries. This is additional to resources for technical cooperation and based on multilateral agreements.

INDICATIVE FINANCE FLOWS BETWEEN PARTICIPATING REGIONS						
	Total revenue of tax	Revenue going to MAF	Payments obtained from Prevention Pillar	Payments obtained from Insurance Pillar	Net payments to and from MAF	Net receipts from NCCF plus contributions from the MAF
United States	11551	6'930.69			-6930.7	4620
Canada	1224	734.48			-734.5	490
Australia, New Zealand	890	533.89			-533.9	356
Japan	2154	1'292.33			-1292.3	862
OECD Europe	7532	4'519.16			-4519.2	3013
Total High income group	*23351*	*14011*	*0*	*0*	*-14011*	*9340*
South Korea	907	272.07	96.3	268.0	92.2	999
Russia	3236	970.92	137.5	142.3	-691.1	2545
South Africa	962	144.34	74.2	85.3	15.1	977
Mexico	753	112.95	111.0	136.6	134.6	888
Non-OECD Europe & Eurasia	2019	302.80	293.2	319.2	309.7	2328
China	9571	1'435.68	1996.4	2800.3	3361.0	12932
Middle East	2711	406.63	212.2	181.9	-12.6	2698
Brazil	704	105.61	194.5	181.8	270.6	975
Other Central & South America	1282	192.32	281.9	260.2	349.8	1632
Non-OECD Asia	2143	321.39	1594.4	1858.8	3131.7	5274
India	315	47.19	2324.0	2045.6	4322.4	4637
Other Africa	0	0.00	1409.5	702.2	2111.7	2112
Indonesia	535	80.18	476.2	219.4	615.5	1150
Total Low and Medium income group	*25137*	*4392*	*9201*	*9201*	*14011*	*39148*
Total World	48488	18403	9201	9201	0	48488

Table S-1: Net annual financial flows of the MAF between participating regions; total receipts from MAF and NCCF (data basis year 2010). The first and last columns show the total tax revenues collected in, and the total resources flowing into a region, respectively.

A financial flow analysis as depicted in Figure S-3 shows that the average contributions of industrialised/high income countries are much higher than in medium- and low income countries although their tax rate only differs on the basis of the application of the free emission level of 1.5 t CO_2eq/capita. The receipts from the MAF show the same pattern, so that the funding scheme leads to a considerable net transfer from high-income to low income countries of about 14 bn USD equivalent to 76% of the funding under the multilateral regime.

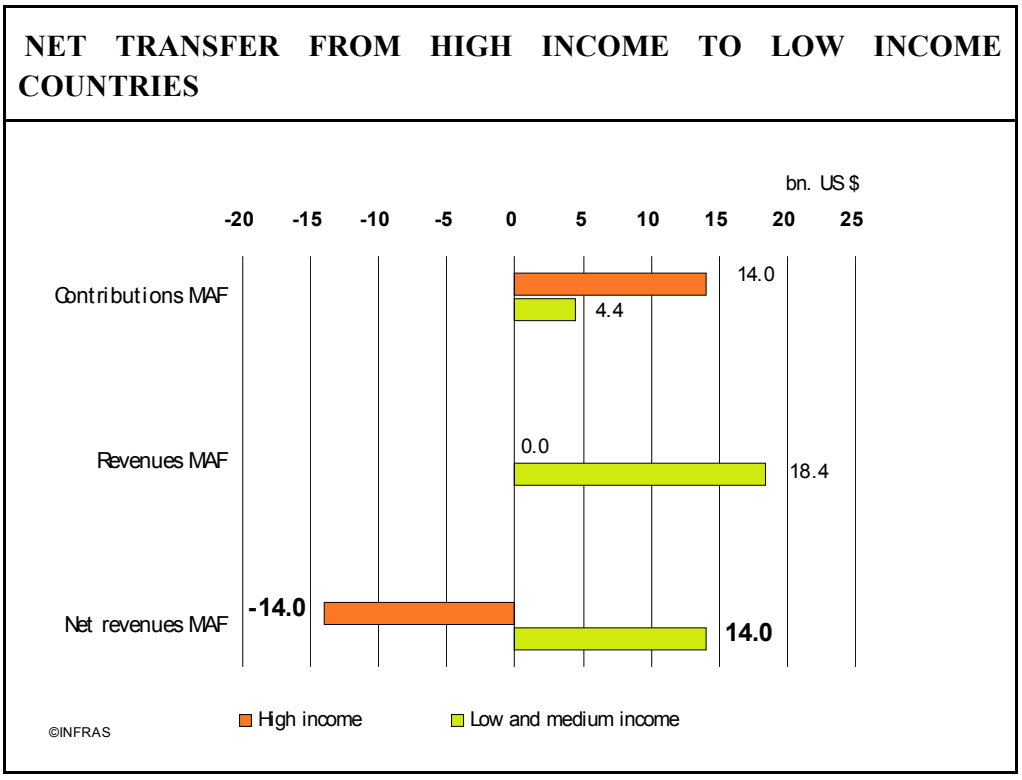

Figure S-3: How many USD per year does a country from the high income/medium income/low income group contribute to, and receive from the MAF? High income countries contribute 14 bn USD, but do not receive any funds. Medium and low income countries contribute 4.4 bn USD and receive 18.4 bn USD.

As only a low CO_2-based levy is introduced, it can be assumed that this will not have any noticeable negative effects on economic growth and GDP in industrialised countries. Also, in emerging and developing countries with low- and medium GDPs, negative economic impacts are not likely due to the tax free emission level of 1.5 t CO_2-eq/capita. Furthermore, the funding scheme can lead to positive economic impacts in developing (DC) and least developed countries (LDC), as adaptation measures are expected to reduce the potential GDP damages caused by climate change.

Implementation issues need to be studied carefully to meet the challenge of administrative efficiency. One issue is how to collect the CO_2-based levy. The tax free emission level of 1.5 t CO_2-eq/capita exempts a significant number of countries with low institutional capacity from establishing a system to collect the CO_2 levy. Furthermore, it alleviates the problem of lack of economic capacity of least developing countries (LDC) to contribute to the Multilateral Adaptation Fund. Experience in several countries suggests that an upstream approach is most feasible: Levies are charged at the points of import and production rather

than at the consumer level. By applying an upstream approach only a small number of subjects needs to be levied.

Further steps

This proposal outlines cornerstones of a climate change financing scheme, primarily for adaptive policies in low and medium income countries. At this stage, the level of consultation and investigation is only limited. Hence this proposal presents a leading idea and a toolbox of instruments for refinement and discussion. Examples of open questions which do need further investigation and consultation are:

- How to ensure an effective governance taking into account the operation of the Kyoto-Adaptation Fund for CDM, and the World Bank Climate Investment Funds?
- How to best modify the proposed design parameters such as the levels of taxation?
- How to best design the Insurance Pillar, especially the form of public private partnerships?

A document presenting this proposal in detail can be found under:

http://www.bafu.admin.ch/klima/index.html?lang=en&download=NHzLpZig7t,lnp6I0NTU042l2Z6ln1ad1IZn4Z2qZpnO2Yuq2Z6gpJCFeH15gGym162dpYbUzd,Gpd6emK2Oz9aGodetmqaN19XI2IdvoaCVZ,s-.pdf