

E3G

Towards a Global Deal on Climate Finance at Copenhagen

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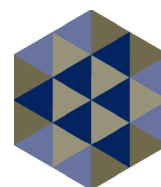
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E3G

Towards a Global Deal on Climate Finance at Copenhagen

Executive Summary

- > Catalysing a global transition to low-carbon, climate resilient economies will require a massive mobilisation of capital. Between now and 2020, developing countries will need at least €170 billion per year by 2020 to support their mitigation and adaptation efforts. Currently, climate finance flows to developing countries total around €6 billion per year – most of it concentrated in a handful of large countries such as China.
- > Many valuable climate finance proposals have emerged inside and outside the UNFCCC negotiations but it is unclear how they can be integrated into a package that will work both politically and economically. This paper considers some of these proposals and outlines the design imperatives of a credible climate finance package for Copenhagen.
- > A global deal on finance at Copenhagen will need to bridge both the *quantitative gap* – how to scale up beyond current inadequate levels - and the *qualitative gap* – how to shift the focus from financing “cheap tonnes of carbon” to transformational change in key sectors of the economy. Closing these gaps requires, in turn, a “grand bargain” between developed and developing countries to address the current *political gap* and mistrust in the negotiations.
- > The grand bargain must be built on acceptance of three core principles:
 1. *that public financing mechanisms should be designed to leverage private capital investment as effectively and efficiently as possible (the principle of “leverage”);*
 2. *that the climate finance architecture must be flexible enough to respond to a wide range of needs in countries at differing stages of development (the principle of “flexible governance”);*

3. *that public finance must be genuinely new, additional and predictable if it is to drive long-term planning and investment decisions and this will require contributing governments to tap into innovative sources of public finance such as bunker revenues (the principle of “innovative public finance”)*.
- > The largest deployment of the necessary funds to tackle climate action is expected to come from the private sector, but this is only feasible over the long term once key infrastructure and governance structures are in place. Radical reform of the Clean Development Mechanism (CDM) will be needed to support low carbon growth in the developing world and this is likely to be a lengthy process. In the meantime public financing must be scaled up rapidly to leverage private capital and support developing countries that are ready to act now.
 - > We need a wider range of climate finance mechanisms tailored to the differing needs of developing countries, large and small, and a shift in focus from financing “cheap tonnes of carbon” to transformational change. The current climate finance architecture fails to provide adequate up-front support to proactive developing countries that are ready to start building low carbon economies and providing innovative models for others to follow.
 - > To increase trust and seal a political deal on climate finance, developed countries must make a credible, long-term commitment to a scalable mechanism for generating new and additional public finance through innovative sources. Revenues derived from regulating aviation and maritime bunker emissions could make a significant contribution, providing €17 - 25 billion per year by 2020 for climate action in developing countries. A large proportion of any bunkers revenue should be earmarked for adaptation efforts in the countries most vulnerable to climate change.
 - > To sustain momentum and prepare countries to benefit from the post-2012 arrangements, Copenhagen must deliver substantial quick-start funding of €6.8 – 13.6 billion per year for adaptation and mitigation efforts before 2012. The design of a quick-start financing governance structure should be scaleable and flexible and serve as a model for long term financing. A substantial share of the overall quick start finance package should be earmarked for investments in adaptation and reducing emissions from deforestation and forest degradation.

1. Catalysing a global transition to low carbon, climate resilient economies

Tackling climate change will require a massive mobilisation of public and private capital; according to multiple sources overall needs for adaptation and mitigation have been estimated to total nearly €170 billion annually in 2020.¹ Most of this investment will need to occur in developing countries which currently have insufficient policies and resources to build sustainable, low carbon economies. Copenhagen must deliver the right quantity and quality of financing to deliver an immediate and sustained shift towards climate compatible growth policies. Many valuable proposals have emerged inside and outside the negotiations but it is unclear how these ideas can be linked together to form a package that will work both politically and economically.

This paper outlines the design imperatives of a credible climate finance package for Copenhagen. It addresses the *quantitative gap* – how to scale up finance – but also *qualitative gaps* – how to shift the focus from financing “cheap tonnes of carbon” to **transformational change** in key sectors of the economy. Closing these gaps requires, in turn, a “grand bargain” between developed and developing countries to address the current *political gap*. The grand bargain must be built on acceptance of three core principles:

1. that public financing mechanisms should be designed to leverage private capital investment as effectively and efficiently as possible (the principle of “leverage”);
2. that the climate finance architecture must be flexible enough to respond to a wide range of needs in countries at differing stages of development (the principle of “flexible governance”);
3. that public finance must be genuinely new, additional and predictable if it is to drive long-term planning and investment decisions and this will require contributing governments to tap into innovative sources of public finance such as bunker revenues (the principle of “innovative public financing”).

¹ Figure compiled by the United Nations Secretary General in a note to Heads of Government regarding the Climate Summit in September 2009 (see UNSG 2009) using information from the IPCC, Stern Review, UNDP, UNFCCC, and World Bank (see related studies in references).

2. Critical gaps in the current climate finance model

The Quantitative Gap

A climate finance package is needed to help cover the *incremental costs* associated with mitigation and adaptation projects in developing countries.² Several estimates of these costs put the overall requirement in the range of €100–250 billion per annum by 2020. Estimates of the *additional* amounts of capital expenditure that need to be financed in developing countries vary but could be in the range of €150 and €190 billion to 2020.

Table 1: Estimates for climate finance required³

Source	Estimated Annual Financing Required	Time Horizon	Comments
Project Catalyst 2009	Incremental costs: €65-100bn for developing countries	2020	<ul style="list-style-type: none"> > Carbon market: €10-15bn > Mitigation: €55 – 80bn > Adaptation = €10 – 20bn > Immediate financing needs (2010 – 2012) = €15 – 30bn, increasing to €90 – 145bn between 2015-20
European Commission 2009	Incremental costs: €100bn for developing countries –	2020	<ul style="list-style-type: none"> > Carbon market: €38bn > International public financing annual costs for = €22 – 50bn: <ul style="list-style-type: none"> • Mitigation: €10 – 20bn; includes energy and industry (€3-6bn) and agriculture and REDD (€7-14bn) • Adaptation: €10 – 24bn • Capacity Building: €1 – 3bn • Technology RD&D: €1 – 3bn
UNFCCC 2008	€257 - 283bn (for all countries)	2030	<ul style="list-style-type: none"> > Financing from both public and private sources. Public financing plays a larger role in both initial investment (mainly for adaptation) and to leverage private finance. > Mitigation: €238bn per year in 2030; €88bn in developing countries > Adaptation: €19 - 45bn per year in 2030
World Bank 2009	Additional capital expenditure: €146 - 187bn for developing	2030	<ul style="list-style-type: none"> > Amount of additional <i>capital expenditure</i> which needs to be financed. > Public and private sources; with public financing for large infrastructure projects

² Incremental costs represent the difference between investing in a low carbon project and its high carbon equivalent.

³ Financing figures shown in Euros using an exchange rate of 1 Euro = 1.473 USD (2008 average) and taken from the following sources: UNFCCC (2008), European Commission (2009), Project Catalyst (2009), World Bank (2009c), and Philippines on behalf of the Group of 77 and China (2008).

Source	Estimated Annual Financing Required	Time Horizon	Comments
	countries		and leveraging private finance. > Mitigation: €95 - 119bn with associated financing needs of €180 - 384bn > Adaptation: €51 - 68bn 2010-2030
G77 + China 2008	0.5% to 1% of the GNP of Annex I Parties (around €136 -272bn in 2020)		> Public sector finance sources to address financing for mitigation, deployment and diffusion of low-carbon technologies, R&D for technologies, capacity-building, preparations of national action plans and implementation, patents, and adaptation

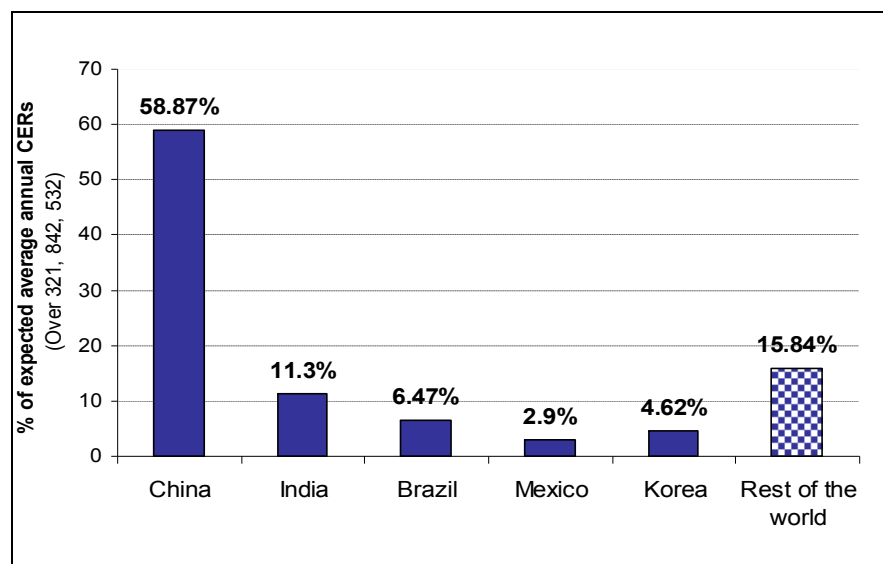
Current annual climate finance flows to support *mitigation* in developing countries total about **€6 billion**⁴ – less than 10% of the proposed amount needed between now and 2020. The carbon market, through the Clean Development Mechanism (CDM), provides most of the low carbon finance to the developing world, with global CDM transactions representing €4.4 billion in 2008.⁵ The CDM has had some success in transferring capital and know-how to developing countries but because of the project-based nature of this mechanism these transfers are too small, occur too slowly and are highly concentrated in a handful of large developing countries. In 2008, nearly 80% of CDM-related credits⁶ were generated in only five countries, with China alone generating nearly 60%.

⁴ UNEP and Partners (2009) Catalysing Low Carbon Growth in Developing Countries: public finance mechanisms to scale up private sector investment in climate solutions. For a discussion of broader financial flows that might support mitigation indirectly (including bilateral ODA, export credits and foreign direct investment) see OECD/IEA (2009a) Financing Climate Change Mitigation: Towards A Framework for Measurement, Reporting, and Verification.

⁵ This figure captures primary transactions. The market value of secondary certified emission reductions (CER) transactions is excluded here as it does not represent new investment in a CDM project.

⁶ Expected averaged annual certified emission reductions (CERs).

Figure 1: Global CDM Market: five countries receive most of the carbon finance flows



Source: UNFCCC (2009) CDM statistics as of October 2009

A major quantitative gap in adaptation finance also exists: out of the €10-68 billion that is needed annually in developing countries to support their adaptation efforts⁷ only €202 million has been committed through the Global Environmental Facility (GEF), the interim operational entity of the UNFCCC.⁸ The UNFCCC Adaptation Fund is intended to mobilise resources through a 2% levy on the CDM, but it is not yet operational.⁹

Efforts to narrow the climate finance gap remain inadequate. In 2008, the World Bank-managed Climate Investment Funds (CIFs) were launched as an interim measure¹⁰ with pledges of over **€4 billion**.¹¹ The total allocated to date is around €414 million.¹² **To finance mitigation and adaptation in the developing world at the scale required by 2020, we need radical reform of the CDM¹³ and a much wider portfolio of scalable public financing mechanisms.**

⁷ See Table 1 with estimates from the European Commission (2009), World Bank (2009) and project Catalyst (2009)

⁸ GEF (2008) GEF 2008 Annual Report.

⁹ UNFCCC (2008) Investment and Financial Flows to Address Climate Change: An Update.

¹⁰ CIF seeks to provide financial assistance to developing countries. The funds are managed by the World Bank and implemented jointly with the regional development banks. For more information see World Bank (2009b) Climate Investment Funds: piloting low carbon growth and climate resilient development in developing countries.

¹¹ Ibid.

¹² Estimate by Bretton Woods Project (2009)

¹³ See OECD/EIA (2009b) Sectoral Market Mechanisms: Issues for Negotiation and Domestic Implementation.

The Qualitative Gap

Multiple shortcomings have been identified in the current climate finance architecture with respect to: (1) Ownership and representation of developing countries; (2) Accountability and transparency; and (3) Operational effectiveness. The challenge is to reach agreement on new governance models for climate finance that are both *legitimate* and *effective*.

Table 2: Key issues in the current climate finance architecture

Issue	Key critique
Ownership and representation ¹⁴	<ul style="list-style-type: none"> > Current structures including the GEF are unbalanced, with donor countries holding the upper hand; > Because climate change disproportionately affects developing countries, these governments need to have a stronger voice in decisions on climate finance; > Without “ownership” over the design of climate finance mechanisms, developing countries will not fully commit to a low carbon transition.
Accountability and transparency ¹⁵	<ul style="list-style-type: none"> > Donors are relying too heavily on existing institutions – in particular the World Bank – which are not accountable to the UNFCCC Conference of the Parties; > There is a lack of transparency in the procedures used to allocate financing or grants through the World Bank’s funds or the GEF.
Operational effectiveness ¹⁶	<ul style="list-style-type: none"> > Inability of current arrangements to manage large-scale financing; > Focus on project-based financing as opposed to sectoral based strategies; > Uncoordinated proliferation of funds leading to multiple reporting mechanisms and potential duplication of efforts; > Inequitable distribution of climate finance (e.g. heavy concentration of CDM finance in China); > High procedural complexity leading to unacceptably slow financing decisions (e.g. slow approval and registration of CDM projects).

¹⁴ See Reed et al. (2009) The Institutional Architecture for Financing a Global Climate Deal: an Options Paper, and Bretton Woods Project (2009)

¹⁵ See Bretton Woods Project (2009)

¹⁶ For more information see analysis from the following sources: Reed et al. (2009); Bretton Woods Project (2009); World Economic Forum (2009) Task Force on Low Carbon Prosperity: Summary of Recommendations; Project Catalyst (2009); UNEP (2009) Financing a Global Deal on Climate Change; London School of Economics (2009) Meeting the Climate Challenge: Using Public Funds to Leverage Private Investment in Developing Countries Summary for policy makers.; and Neuhoff et al. (2009) Structuring International Financial Support to Support Domestic Climate Change Mitigation in Developing Countries.

The CDM was designed as a market mechanism seeking to lower the cost of compliance with the Kyoto Protocol in developed countries through the financing of the least-expensive mitigation opportunities in developing countries. As a result the CDM model focuses on delivering “cheap tonnes of carbon”, regardless of the degree of linkage to a wider low carbon development strategy.¹⁷ This model works in favour of large countries with plentiful short-term mitigation opportunities and underplays the need to invest in more far-reaching, long-term initiatives. A growing number of small, proactive developing countries are ready to start building low carbon economies but need support to implement policy reforms and meet up front investment costs. Their needs are not being met by current arrangements. We need a switch to a *transformational* climate finance rationale.

The current climate finance architecture fails to provide adequate up-front support to pro-active developing countries that are ready to start building low carbon economies and could provide innovative models for others to follow. This is a missed opportunity. We need a wider range of climate finance models tailored to the differing needs of developing countries, large and small, and a shift in focus from financing “cheap tonnes of carbon” to transformational change.¹⁸

The Political Gap

The launch of the Climate Investment Funds (CIFs) in 2008 was intended as part of an exercise in trust-building between developed and developing countries, designed to get projects moving and showcase the benefits of low carbon investment. However, this effort has had limited success in practice, with some developing countries seeing the CIFs as a plot by developed countries to pre-define the post-2012 climate finance architecture ahead of Copenhagen. Developed countries reject this argument, pointing out that under “sunset” provisions the CIFs are due to be phased out after 2012, but the governance issue remains deeply divisive.

The priority of developing countries is to increase their representation in the governance of international climate finance through a new, centralised funding mechanism accountable to the UNFCCC Conference of the Parties (COP). They

¹⁷ Neuhoff et al. (2009).

¹⁸ For a detailed country analysis see Johnson et al (2009) Low Carbon Development in Mexico.

also want a firm commitment by developed countries to make substantial public financing contributions, over and above existing ODA commitments of 0.7% of Gross National Income. Developed countries, by contrast, favour a decentralised funding mechanism that builds upon existing institutions and allows them to exercise control over the delivery and use of the financial resources they provide. With a few exceptions (e.g. Norway, Switzerland), they have avoided tabling concrete proposals for raising new and additional public finance.

At Copenhagen governments need to unite around a climate finance package that closes the quantitative, qualitative and political gaps identified above. Short-term proposals for pre-2012 “quick start” climate finance need to be integrated with a credible longer-term transformational vision.

3. Closing the gaps: guiding principles for a global deal on climate finance

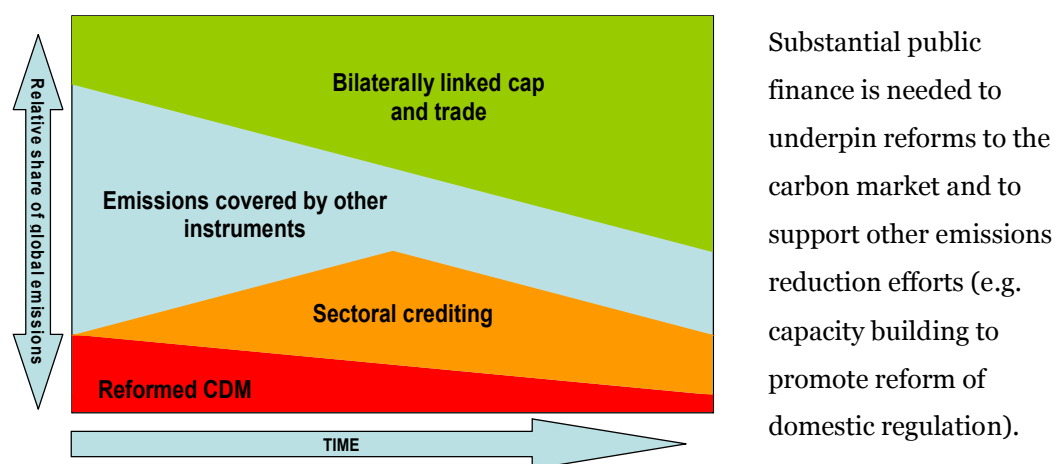
Many valuable proposals have emerged inside and outside the negotiations on ways to scale up climate finance and provide a more diverse range of support. In terms of efficiency and effectiveness, a strong emphasis is placed on using public finance to leverage much larger flows of private capital and on delivering support through a decentralised network of institutions. Developed countries in particular have stressed the principles of leverage and flexible governance. However, these two principles will not be enough to seal a political deal unless they are combined with the principle of innovative public financing – that is, a credible, long-term commitment by developed countries to a scalable mechanism for generating new and additional climate finance.

Leverage

Current financing proposals by developed countries tend to rely heavily on carbon markets. For example, the recent communication by the European Commission foresees a rapid transition from project-based CDM to a programme-based model and sectoral crediting and trading for advanced developing economies – see Figure 2:¹⁹

¹⁹ European Commission (2009) Stepping up International Climate Finance: A European Blueprint for the Copenhagen Deal.

Figure 2: Gradual Development of the Global Carbon Market



Source: European Commission (2009) Stepping up International Climate Finance: A European Blueprint for the Copenhagen Deal.

However, the EU's own recent experience with the ETS highlights the complex challenges involved in reforming the global carbon market, such as agreeing baseline emissions trajectories for key sectors. Overcoming these challenges will take years and require substantial up-front investment in capacity building and policy reform. Moreover, even reformed carbon markets are unlikely to make much contribution to decarbonising key sectors such as road transport or buildings – let alone to investments in flood defences or other forms of adaptation. Public finance will be critical in all these areas, for example to build capacity for stronger domestic regulation.

Institutional investors - pension funds, insurance companies and sovereign funds - own or manage much of the capital that must be deployed to tackle climate change.²⁰ These investors will not deploy capital unless the risk-reward calculus tilts in favour of climate-friendly projects. Most of the obstacles that investors face are context-specific and will only be removed with specialised, targeted strategies combining several instruments.

²⁰ According to Watson Wyatt (2009: quoted in UNEP and Partners, 2009), pension funds alone, public and private, are in charge of allocating assets worth over \$12 trillion.

Public financing mechanisms can and should play a pivotal role in leveraging private capital.²¹ It is estimated that for every \$1 of public investment, \$3 - \$15 can be leveraged.²² **The post-2012 climate finance regime must prioritise public financing mechanisms that succeed in effectively leveraging private capital.** For example, concessional debt is a public financing mechanism which the private sector finds relatively easy to manage and which has been used successfully in many mitigation projects. Other potentially catalytic public mechanisms include:²³

1. **Risk-mitigation mechanisms:** For example, 1) country risk guarantees to investors (e.g. coverage for country risks such as weak contract enforcement to help mobilise capital from cautious institutional investors); 2) “policy risk” cover against unexpected reversals in climate policy (e.g. earlier than expected phase-out of feed-in tariffs); or 3) currency funds that offer hedging products, especially in countries that have currencies that are not traded internationally.²⁴
2. **Low carbon project development bodies:** Publicly-funded, privately run companies would undertake early-stage work to help low carbon projects achieve the minimum scale required to be commercially attractive. This would help address the so-called “deal flow” problem.²⁵
3. **Low carbon advanced market commitments:** Modelled on past efforts to promote the availability of vaccines in developing countries, this instrument would involve using public finance to provide long-term price assurances to stimulate development and diffusion of clean technologies.²⁶

The success of these models depends ultimately on developing countries putting in place stable and transparent macroeconomic policies to attract low carbon investment. Public finance can help to build institutional capacity and promote policy reform, including the design of Low Carbon Development Strategies and Nationally Appropriate Mitigation Actions (NAMAs). Without the right policy framework, scattered CDM projects are unlikely to have much impact on a country’s long-term emissions trajectory or increase its attractiveness to low carbon investors. Norway has paved the way internationally by developing a

²¹ Public finance mechanisms could be broadly divided into “spending” tools (e.g. paying for policy risk cover) and “fund raising” tools (e.g. assessed public contributions to a climate fund). Here we concentrate on the former category.

²² UNEP and Partners (2009)

²³ See London School of Economics (2009) and World Economic Forum (2009)

²⁴ UNEP and Partners (2009)

²⁵ UNEP and Partners (2009)

²⁶ Financial Times (17 September 2009) Green Stimulus for Poorer Countries.

framework of financial support including detailed MRV provisions to help revamp the national policy framework in countries such as Guyana; this could become a blueprint for other countries to follow.²⁷

In addition to the mechanisms mentioned governments could explore additional structures to catalyze private capital:²⁸

1. **Cornerstone funds:** Large commercially managed regional fund structures would rely on anchor financing from institutional investors, as well as strategic support from public sector finance, to attract additional equity and debt financing, with the objective to invest in low carbon projects in developing countries. Multilateral Development Banks would convene institutional investors and underwrite some of the risks of the investments.
2. **Challenge funds:** Multilateral Development Banks would bid for access to a “package of support”, for example, a mix of debt, risk and credit enhancing instruments mentioned above to fund managers who offer the best options.

The success of these structures will depend on the introduction of public finance mechanisms (for example, risk mitigation tools) discussed above.²⁹

Flexible governance

The sheer diversity of climate financing needs in developing countries around the world means there is an argument against a rigid, centralised governance structure. There has to be enough flexibility to allow for effective management and disbursement of a wide array of public and private financing instruments including risk guarantees, equity, concessional loans and grants.

A flexible governance model will need to combine elements of the top down, COP-mandated fund structure proposed by developing countries with the developed country’s preference for a decentralised, bottom-up approach to delivery.

There are signs that a consensus along these lines is possible – for example the Major Economies Forum meeting in October³⁰ saw further discussion of a

²⁷ For a discussion of potential NAMAs in pioneering developing countries see: E3G (2009) How Can Copenhagen Support NAMAs in Pioneering Developing Countries?

²⁸ London School of Economics (2009) and World Economic Forum (2009)

²⁹ London School of Economics (2009) and World Economic Forum (2009)

³⁰ Major Economies Forum (2009) Chair’s Summary: Fifth Meeting of the Leaders’ Representatives of the Major Economies Forum on Energy and Climate

flexible governing structure along the lines of the Mexican Proposal for a World Climate Change Fund guided by the UNFCCC Conference of the Parties.³¹ However the MEF is a forum for dialogue rather than negotiation – the final deal will need to be done with a wider range of countries in the UNFCCC context and this will require compromises all round.

On the adaptation side, the UN Adaptation Fund is emerging as a potentially promising model with a high degree of legitimacy in the eyes of developing countries. The challenge now is to make the fund fully operational and link it to a stronger long-term revenue raising mechanism. On the mitigation side, there is growing support for the idea of a “UNFCCC Climate Registry” to link enhanced actions by developing countries with enhanced international support for those actions.³² Developing countries would submit their NAMAs and financing requests and frame them as part of a national low carbon development strategy (to be certified by a COP-guided mechanism to ensure comparability and high quality). Proposed NAMAs would enter a registry and all interested funders – public and private – could start discussions or negotiations with the requesting country.

Early establishment of a UNFCCC Climate Registry could play a key role in laying the foundations of the post-2012 climate finance regime – just as the creation of the CDM Executive Board in 2001 enabled a quick start on CDM projects after the Kyoto Protocol finally entered into force four years later.

Innovative financing mechanisms

Developing countries are rightly critical of the string of broken promises by developed countries on increasing Official Development Assistance (ODA) and meeting UNFCCC commitments. To close the trust gap and seal a political deal on climate finance, developed countries must make a credible, long-term commitment to a scalable mechanism for generating new and additional climate finance.

Developing countries maintain that climate finance contributions must be additional to, not a substitute for, existing commitments by donors to provide 0.7% of their GNI for ODA. The US, EU, Japan and other contributing countries are reluctant to give such a commitment, especially given the very large sums

³¹ See Mexico (2009) Mexican Proposal for a World Climate Change Fund: Green Fund.

³² The Climate Registry has been proposed by Reed et al. (2009)

involved and the pressure on government budgets. A realistic way out of this impasse is greater reliance on innovative public financing mechanisms such as emissions-related auction revenues.

One of the most promising options is to harness revenues derived from regulating aviation and maritime bunker emissions. Conservative estimates suggest that €17 - 25 billion could be raised per year by 2020 for climate action in developing countries – enough to make a major contribution towards closing the trust gap.³³ There are two main obstacles to agreement: (1) the objection of some developing countries to a global agreement regulating bunker emissions on the grounds that this breaches the principle of common but differentiated responsibilities; and (2) the desire of many developed countries to use bunker revenues for their own domestic purposes. Compromise on both sides would slow the growth in bunker emissions and break the deadlock in the finance negotiations.

4. Quick start funding for pre-2012 action

Agreement on these long-term principles – leverage, flexible governance, additionality – is the key to sealing a deal at Copenhagen on post-2012 climate finance. In addition, to sustain momentum and prepare countries to benefit from the post-2012 arrangements, Copenhagen must deliver substantial quick-start funding for adaptation and mitigation efforts before 2012. The amount required is in the order of €6.8 - 13.6 billion per year.

Quick start funding mechanisms must be consistent with the long-term design principles set out above – in particular they must support the shift in focus from financing “cheap tonnes of carbon” to transformational change in key sectors of the economy. Funding mechanisms will need to be tested, enhanced, and scaled up over time as countries increase the ambition and sophistication of their climate strategies. A substantial share of the overall quick start finance package should be earmarked for investments in adaptation and reducing emissions from deforestation and forest degradation.

³³ European Commission Staff Working Paper accompanying Communication *Stepping Up International Climate Finance: a blueprint for the Copenhagen deal*. See http://ec.europa.eu/environment/climat/pdf/future_action/sec_2009_1172.pdf.

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