



SCALING UP FINANCE FOR BIODIVERSITY... AND THE ROLE OF BIODIVERSITY OFFSETS

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Why is finance for biodiversity important?

- Declining biodiversity trends at global level
 - *OECD Environmental Outlook to 2050* projects a further 10% loss by 2050 under business as usual. Yet biodiversity and ecosystem service benefits are high
- Adverse impacts to environment, health, economic growth... human well-being
 - Will need to significantly scale up biodiversity outcomes...

CBD refers to six “innovative financial mechanisms”:

- Environmental fiscal reform
- Payments for ecosystem services
- Biodiversity offsets
- Markets for green products
- Biodiversity in climate change funding
- Biodiversity in international development finance



Scaling-up Finance Mechanisms for Biodiversity

Questions examined

- What are these mechanisms, their purpose and applicability?
 - How much finance have they mobilised and what opportunities are there to scale-up?
 - What are the key design and implementation issues to help ensure:
 - environmental effectiveness;
 - cost effectiveness; and
 - distributional equity
- i.e. environmental and social safeguards?

How do the finance mechanisms compare?

Finance mechanism	Scope of finance	Source of finance	Direct vs. indirect finance	Impacts on drivers	Beneficiary vs. polluter pays
Environmental Fiscal Reform	Local National	Private (& public)	Direct	Yes - direct	Polluter
Payments for Ecosystem Services	Local National International	Private & public	Direct	Yes - direct	Beneficiary
Biodiversity offsets	Local National	Private (& public)	Direct & indirect	Yes - direct	Polluter
Markets for green products	Local National International	Public	Indirect	Yes - indirect	N/A
Biodiversity in climate change funding	Local National International	Public & private	Indirect	Depends	Polluter
BD in int'l development finance	International	Public (& private)	Indirect	Depends	N/A



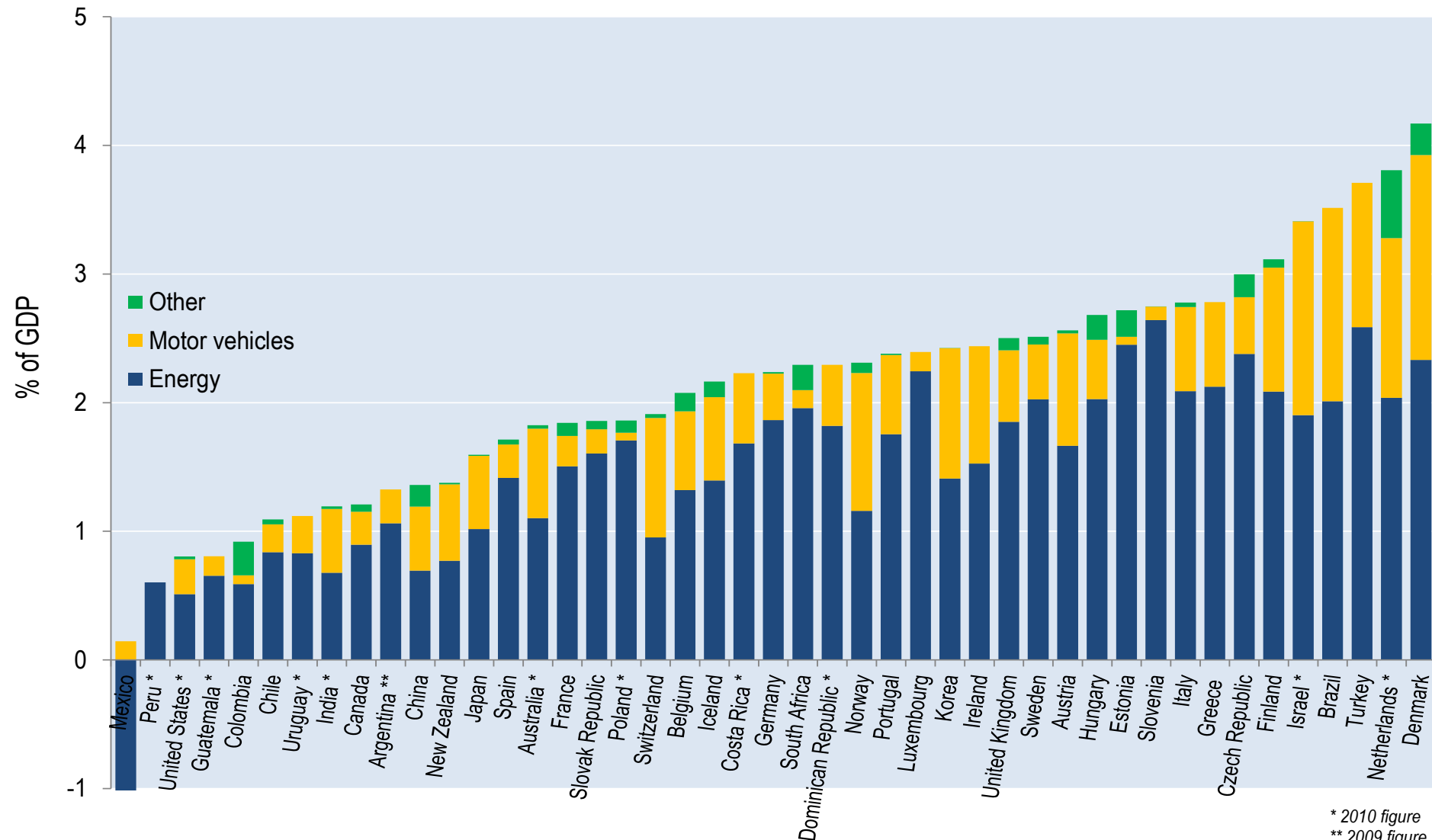
How much finance have they mobilised?

Finance mechanism	Finance mobilised (<i>Handle with care - complete data not available!</i>)
EFR	Total revenue from <u>environmentally related taxes</u> in OECD countries in 2010: slightly below USD 700 billion. <u>But</u> taxes on “other” (i.e. pollution and resources) <u>small</u> fraction of this
Payments for Ecosystem Services	5 national programmes alone channel > USD 6 billion p.a. (OECD, 2010) Payments for watershed services > USD 9 billion in 2008 (Parker and Cranford, 2010) ...More than 300 PES programmes worldwide
Biodiversity offsets	USD 2.4-4 billion in 2011 (Madsen et al, 2011) ~ 45 programmes worldwide in 2011; more than 90 in 2014
Markets for green products	N/A . Green commodity markets on the rise - <i>some</i> fetch price premiums
Biodiversity in climate change funding	Estimated total climate change finance USD 70-120 billion in 2009-2010 (north to south flows) (Clapp et al, 2011); Biodiversity related climate finance <i>may</i> approximate USD 8 billion
BD in int'l development finance	Biodiversity related ODA (development finance) estimated at USD 6.1 billion per year over 2010-2012 (OECD DAC, 2014)



Revenues from environmentally related taxes

in per cent of GDP, 2011



* 2010 figure
** 2009 figure



Design and implementation issues

- some examples

- Determining business-as-usual **baselines** is important for many of these mechanisms (e.g. PES, biodiversity offsets, biodiversity in climate change funding)
- **Prioritise/target finance** to areas with high biodiversity benefits, high risk of loss, low opportunity costs
e.g. Targeting payments in the Forest Conservation Fund programme in Tasmania, Australia led to 50% increase in cost-effectiveness i.e. greater biodiversity benefits given a fixed budget
- Robust **monitoring, reporting and verification...** to evaluate programmes, assess progress, and improve over time.
 - > Biodiversity related ODA can play a key role



Examples of strengths and challenges...

Finance mechanism	Benefits	Challenges
Environmental Fiscal Reform	Least-cost, generates revenue, polluter pays (incl. private sector), impact on drivers of loss	Political palatability. Enabling conditions include established tax system capable of levying, collecting, redistributing revenue
Payments for Ecosystem Services	Can be least cost, direct signal and impact on drivers of loss	Rigorous MRV especially important
Biodiversity offsets	Can be least cost, can generate revenue, polluter pays (incl. private sector), impact on drivers of loss	Rigorous MRV especially important
Markets for green products	Increases information to consumers	Market saturation. Standards needed
Biodiversity in climate change funding	Co-benefits	Rigorous MRV especially important
BD in int'l development finance	Co-benefits. Plays important role for capacity-building, enabling conditions...	Ensuring effectiveness and that biodiversity priorities are addressed



Biodiversity Offsets: Effective Design and Implementation

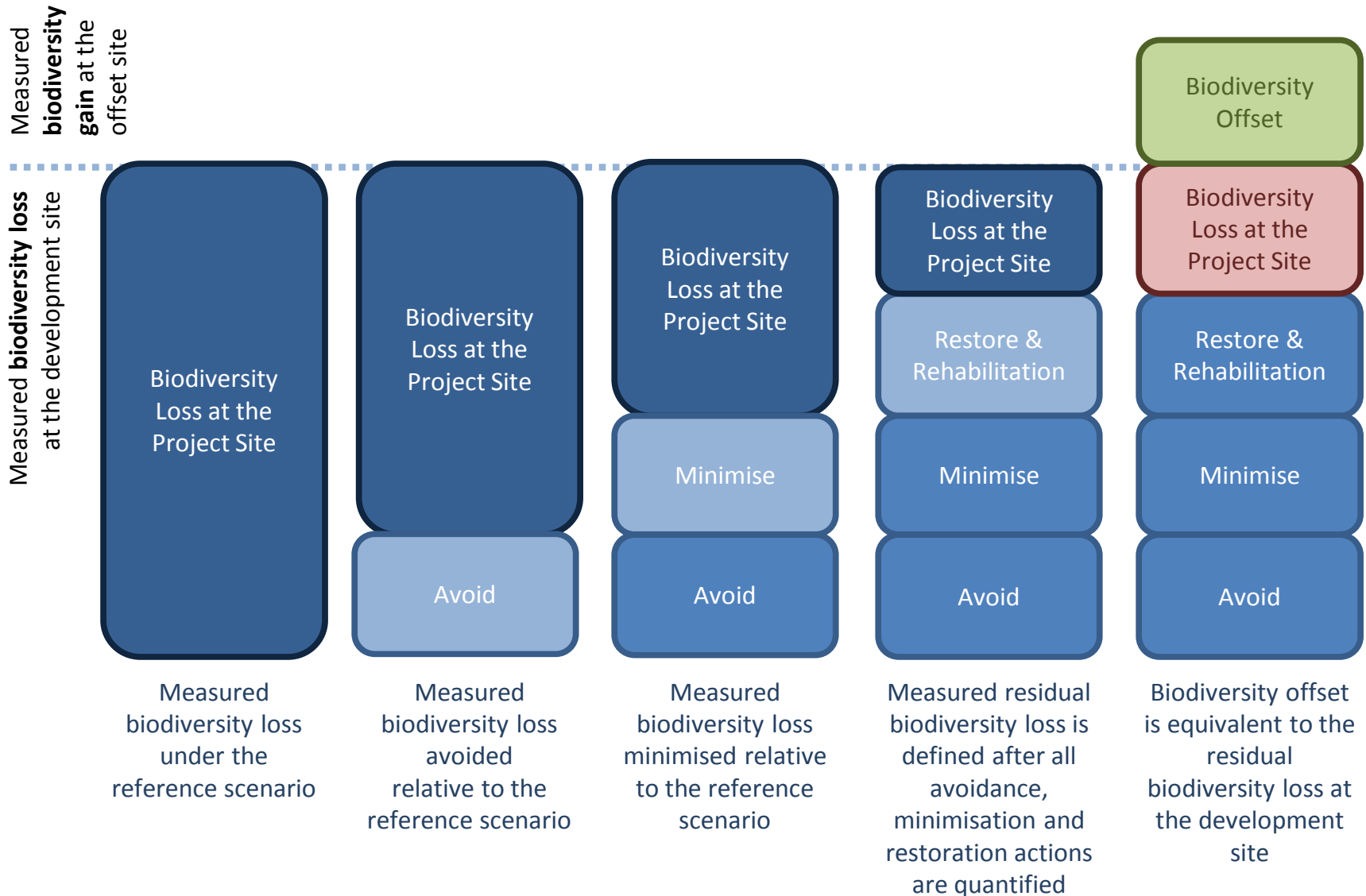
Biodiversity Offsets – a closer look

What are they? **Biodiversity offsets** are measurable conservation outcomes that result from actions designed to compensate for significant, residual adverse impacts to biodiversity from development projects. They are intended to be implemented only after reasonable steps have been taken to **avoid** and **minimise** biodiversity loss at a development site.

- Today, **56** countries have laws or policies in place that specifically require biodiversity offsets or some form of compensatory conservation for particular sets of impacts
- About **97** programmes operating worldwide and **15** programmes under different stages of development



No Net Loss and the Mitigation Hierarchy





3 types of biodiversity offsets in practice

One-off offsets: Once (predicted) adverse impacts have been evaluated, the biodiversity offset is carried out by the developer or by a subcontractor (e.g. a conservation NGO).

- Examples: vegetation management offsets in Queensland, Australia; Species Mitigation and Wetland Compensatory Mitigation in the United States; and Fish habitat Compensation in Canada.

In-lieu fees: a government agency stipulates a fee that a developer has to pay to a third party, to compensate for residual adverse biodiversity impacts.

- Examples: US Species Mitigation and Wetland Compensatory Mitigation; forest compensation schemes in India and Mexico.

Biobanking: once (predicted) adverse impacts are evaluated, the developer can purchase offsets directly from a public or private biobank.

- Examples: US Wetland Compensatory Mitigation; the New South Wales Biobanking scheme, Australia; Compensation pools under the German Impact mitigation Regulation.



Key design and implementation features

- Thresholds and coverage
- Equivalence
- Additionality
- Permanence
- Monitoring, reporting and verification
- Transaction costs
- Compliance and enforcement



Good practice insights on offsets – some preliminary insights

- Clear objectives on goals of programme
- Clear guidance on implementing the mitigation hierarchy
- Sufficient technical capacity and human resource for robust **MRV** – including on-site checks
- **On-line databases** - e.g RIBITS in US; NATUREG in Germany – enhance transparency, reduce transaction costs
- 3 types of offsets – different pros and cons
- Regular programme evaluation



Thank you!

For further information on OECD work on the economics and policy of biodiversity and ecosystems, visit:

www.oecd.org/env/biodiversity

Key areas of OECD work on biodiversity:

- ❖ Biodiversity Indicators, Valuation and Assessment
- ❖ Economic Instruments, Incentives and Policies for Biodiversity
- ❖ Biodiversity Finance, Development and Distributional Issues

Recent and forthcoming work:

- *Paying for Biodiversity: Enhancing the Cost-Effectiveness of Payments for Ecosystem Services (OECD, 2010)*
- *Scaling Up Finance Mechanisms for Biodiversity (OECD, 2013)*
- *The Role of National Ecosystem Assessments in Influencing Policy Making (OECD, 2014)*
- *Biodiversity Offsets : Effective Design and Implementation (OECD, forthcoming 2014)*
- *Policy Response Indicators for Biodiversity: Aichi Target 3 and 20 (OECD, forthcoming 2014).*

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